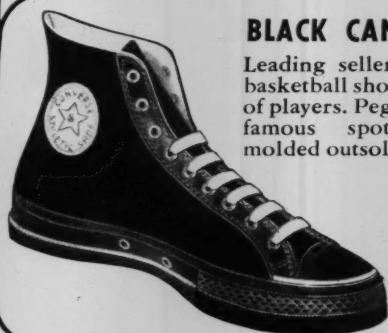




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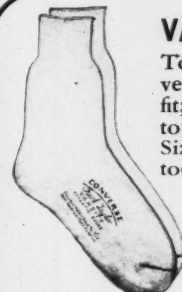


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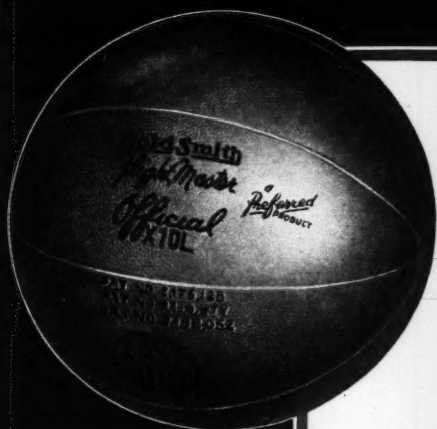
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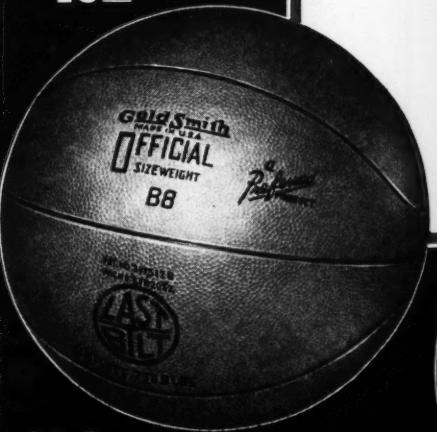
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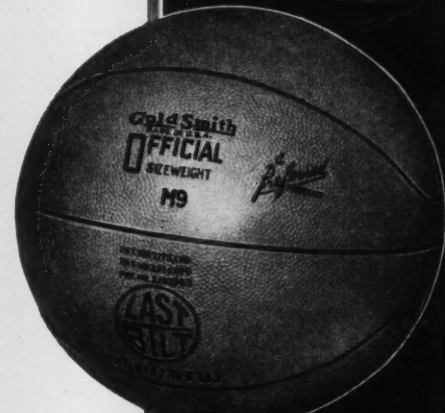
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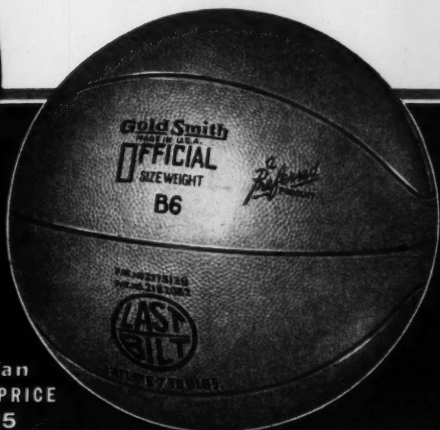
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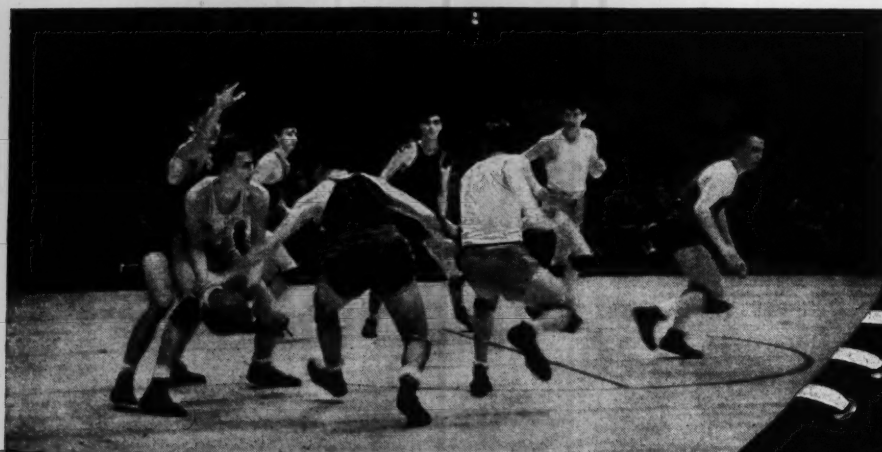
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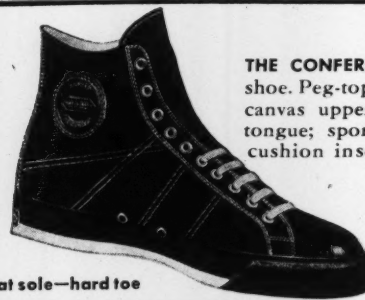
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THIS may seem a grim sort of time to be looking into the future through a rose-colored crystal ball, but the way events are now shaping up we feel safe in predicting that health and physical education activities will play a more vital role in the school curriculum of tomorrow than ever before.

Part of our enthusiasm, of course, may be attributed to the faith we have always had in the values and the future of these activities. But our prophecy is based on something more concrete. We have allusion to the national preparedness plan of the American Association of Health, Physical Education and Recreation. Worked out with the United States Office of Education, it now is in the hands of members of Congress in the form of a bill.

Before delving into the plan, or bill, we had our doubts as to its contents. "National preparedness" has a militaristic flavor which smacks of regimented drill and marching. And while this has its place in our other national defense measures, there is no need for it in our secondary school curricula.

Our fears, however, were ill grounded. The plan does not propose to prepare youth for the actual, technical task of warfare. The program is primarily concerned with the development of such basic qualities as fitness, endurance and courage, which are a *prerequisite* to military training.

The special committee of educators who drafted the plan have wisely refrained from tampering with the objectives of physical education. These are in harmony with those of national defense, both being physical, social, mental, and emotional in nature. The change that is recommended is in the *methods* of attaining these objectives.

The plan proposes to extend and intensify school sports and physical education activities as a means of integrating them with the national preparedness program. Increased emphasis is put on health service and follow-up programs. At the same time, the schools will be required to offer the most healthful environment possible in housing, most hygienic known in schedules and the best that can be established in teacher-pupil relationships.

Under physical education, a wide extension of the high school physical education program is recom-

Here Below

mended. Three hundred minutes a week will be thought of in terms of a minimum, the periods of training to be daily and in the afternoon as far as possible.

The nature of the problem of serving *all* boys and girls is not to be lost in the extreme athletic practices serving only the few. Motor activities will be conducted for *all* boys and girls. Vigorous, rugged and daring activities will be offered to *all* who are capable of engaging in them. Only the few who are unable to participate will experience restricted programs. Saturdays, vacations and holidays are expected to be utilized.

One hour a day

Three hundred minutes a week with daily training boils down to an hour a day of physical education. This may not seem like a great change. In fact there are some progressive schools which actually specify five one-hour class periods weekly plus participation in after school intramural and recreational activities.

However a recent study by Irwin and Reaves revealed that even these schools are not practicing what they preach. Of the 77 schools they covered, they found that 60 percent require physical education less than three periods daily; that a majority require physical education two periods or less weekly; and that less than 25 percent of the total students covered in the survey participate in after-school intramural programs. And these are *progressive* schools! What the statistics are for the ordinary schools are discomfiting to imagine. In any light it is apparent that a large majority of our schools are not providing the necessary program conducive to national preparedness.

Perhaps the most radical, certainly the most intriguing, recommendation the plan has to offer is the es-

tablishment of school camps through government subsidy for the purpose of giving reality to democratic ideals, promoting national solidarity, and insuring, especially for urban youth, essential experiences that only come from close contact with nature.

Boards of Education, School Trustees, and similar educational officers should be given financial help to establish school camps. Attendance of all children of junior and senior high school age is highly desirable but the nature of this attendance should be determined by local community needs. Attendance or an acceptable equivalent should be required for graduation from high school.

School camps should be conducted during the summer vacations and attended for at least thirty days of each of three summers, preferably the three summers just preceding graduation from high school.

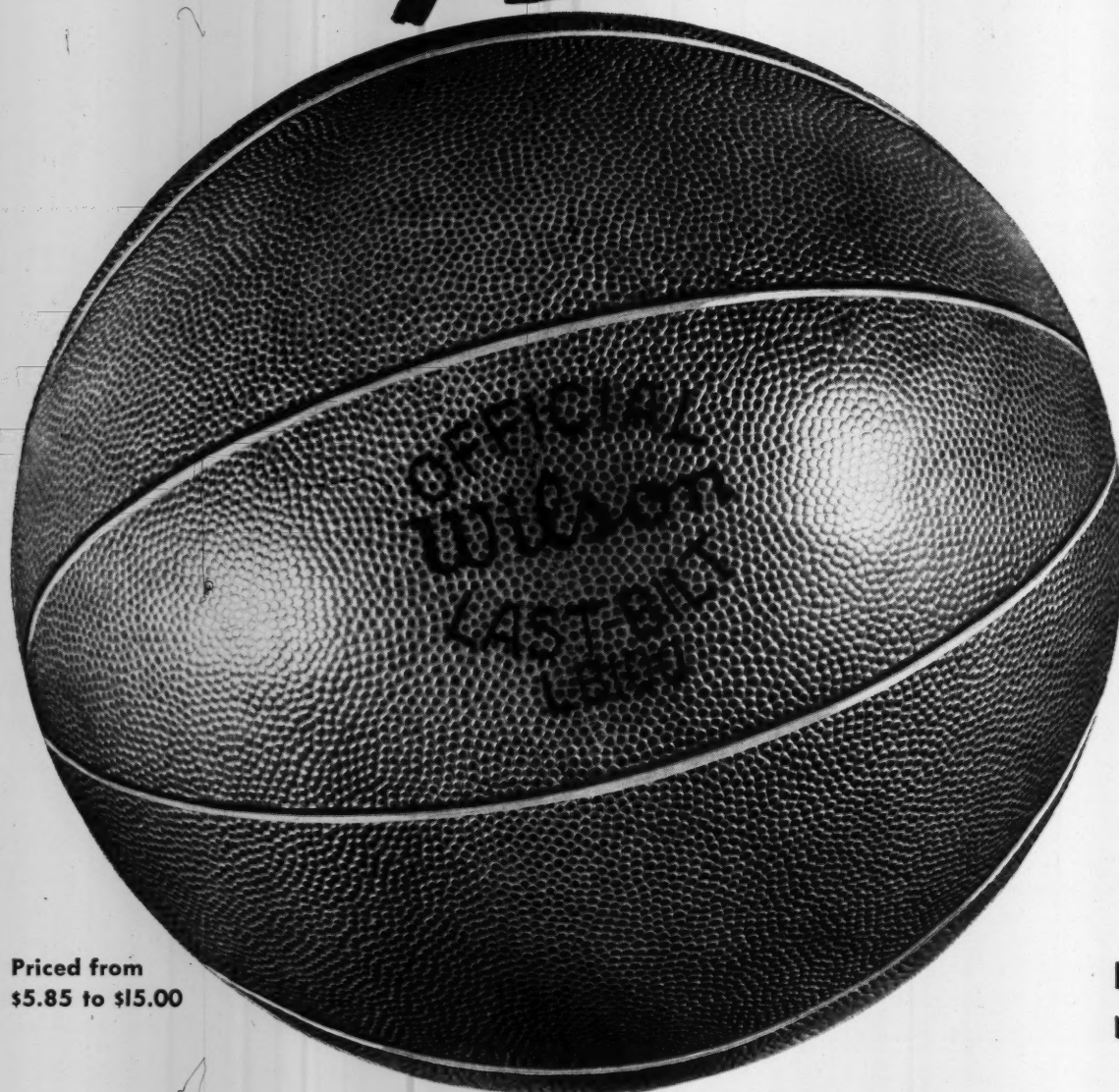
The program should include camp construction, soil conservation, forest preservation, road and trail building; special instruction should be provided in various manual and mechanical fields such as handling machinery, trucks, tractors, and other machines of this type as approved by vocational authorities. Stress should be placed on caring for themselves in the open; emphasis should be given to hikes for endurance, swimming for safety, adaptability for general utility. The rudiments of military procedure could be started, and such military skills as map reading, reconnaissance, trail blazing, elementary aviation, and similar ones learned. . . .

Naturally a program of this type will require organization beyond the scope of anything we have now. To meet this administrative need, the plan proposes a National Director of Health, Physical Education and Recreation with a staff of associates and assistant directors, research assistants and clerical and secretarial assistants. The program will be initiated by the Director but carried out by the states.

Financial aid will be allotted to the states to provide for teacher preparation, improvement of facilities, salaries for administration, supervision, and teaching, and for construction, operation, and maintenance of camps.

Most of these things do not represent anything new. They are the things all progressive-minded physical educators have been aiming their sights at for years. If the bill gets by, it should give physical education the greatest impetus it has had since World War No. 1.

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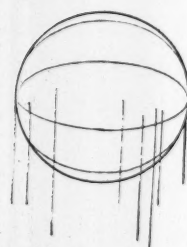
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From Coaching School Notebooks

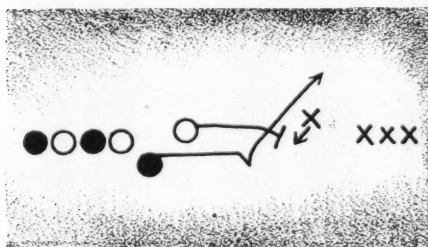
Homer Norton

Reported by Wendell D. Mansfield
Bates College, Lewiston, Me.

AT THE New York Herald Tribune Coaching School, Homer Norton, the bald, stocky strong man of the Texas A. & M. team which won eleven straight games and the mythical national championship last fall, sidestepped most of the rudiments of the game to give a more advanced course on offense and defense.

He outlined finesses in passing and variations in blocking, explained how to set up SS (sound screwy) defenses and how to combat them with shifting assignments.

Norton is from the razzle-dazzle section but his eleven last year was one of the top teams in the nation in running gains. The Aggies are



Diag. 1, Downfield Blocking

not over-balanced. They spend a lot of time on their running attack.

In his passing game, Norton believes in putting pressure on one or two particular men, by setting two receivers on one defender. The old style was aimed to draw a defender out and put a receiver in his vacated territory, but the Aggie coach merely aims to make a defender commit himself by throwing two men at him.

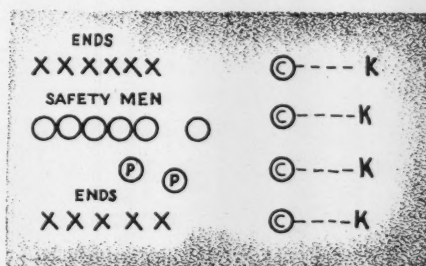
The old theory was to watch the offensive player. The new theory is to watch the defensive man. As soon as he commits himself by so much as a step in the direction of one potential pass receiver—"bing! we pass to the other."

Although the Aggie pigskin professor skipped the more elementary fundamentals of the game, he did present a few basic drills which make his offense go.

Norton thinks that reaction drills are very essential in determining the reflexes of his players. The exercises he described were similar to the old Major Frank Cavanaugh (Fordham) "grass drills" in which the boys execute various exercises upon command.

Part of the drill consists of running in place with knees high. Upon the command "front" the boys hit the dust. The hands are then placed behind their backs. In this position, they are supposed to obey further commands such as "right," "left," "back," and "up" as quickly as possible.

Considerable time is also spent on dual work where the boys pair off and practice various blocks upon each other, both of the dummy and



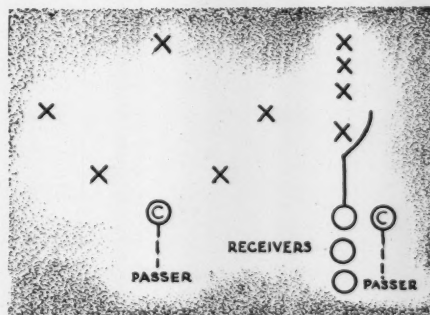
Diag. 2, Combination Drill

live variety. A great deal of the success the Aggies enjoy in downfield blocking is attributed by their coach to the drill in Diag. 1.

The ball-carrier (heavy circle) follows a blocker toward a potential tackler. Upon drawing close, the runner fakes to either side to start the man in that direction. The interfeer then makes his block and the runner cuts in the oposite direction.

By having the ball-carrier set up the tackler for the blocker, Norton feels that much of the hesitancy is eliminated from the blocking situation. The runner's feint tips off the blocker, telling him which way the ball-carrier is going. The old method of having the blocker go directly toward the defensive man made a guessing game out of it for the ball-carrier. He couldn't cut until his teammate blocked one way or the other.

Diag. 2, a mass combination kick-



Diag. 3, Pass Defense

ing and passing drill, is a splendid example of Norton's efficiency in conserving practice time. The punters are set up behind the centers and kick to the safety men farther down the field. The safeties, or the passers standing beside them, then pass the ball to the ends who return the ball to the centers. The snapper-backs are shifted around daily to accustom all the kickers and centers to each other.

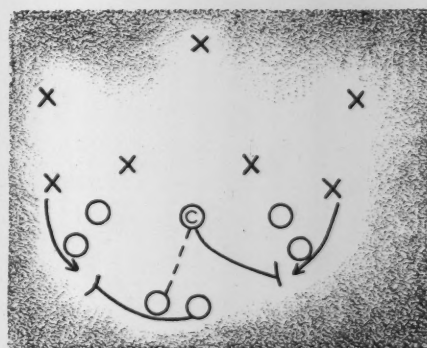
A drill to develop defensive agility and shiftiness, especially for purposes of pass defense, was presented next. The players stand facing the coach. Upon the command "backward," "right" or "left" they run in these directions, always keeping their eyes upon the coach.

The first drill in Diag. 3 is also aimed at the perfection of pass defense. A defensive backfield lines up facing the passer. They hold still until the thrower lets one go and then try to catch it before it hits the ground.

The second drill affords a means of practicing individual pass defense, one defensive man covering one offensive man.

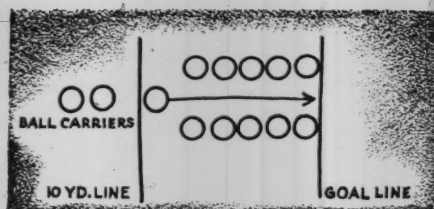
Complete forward passing offensive and defensive work is organized to approximate game conditions. Two skeleton teams wage a forward passing battle where the object is to make twenty yards in four downs (Diag. 4).

To inure his backs to the des-



Diag. 4, Intersquad Game

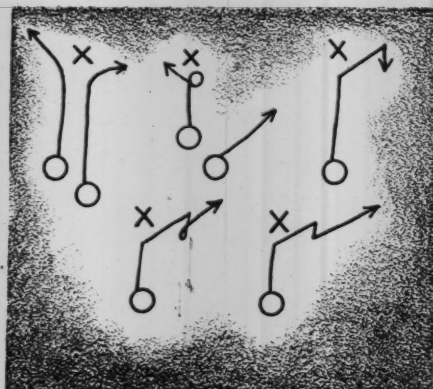
perate shoving around they get on goal line plunges, Norton utilizes the drill shown in Diag. 5. The ball-carrier stands on about the ten-yard line facing two rows of backs lined up at right angles to the goal line about two yards apart. The ball-carrier runs the gauntlet. He tries to drive over the goal while his teammates pull, push or shove him to knock him off-balance and make him fumble.



Diag. 5, Running the Gantlet

Norton uses a balanced double wingback formation with the ends loose and two tailbacks on line with each other between three and a half to four and a half yards behind their guards. This type of alignment, he believes, partially eliminates the bugaboo of most coaches today—the shifting defense. "Because we are balanced," Norton says, "they must be."

If, after coming out of the huddle, the quarterback observes a defensive formation which is too strong to buck with the play he has signaled for, he may call for another play. The first digit of the next se-



Diag. 6, Escapes

ries of numbers he calls indicates the play to come after another shift.

The Aggies are equipped with a set of offensive rules to observe against shifting defenses. These rules are:

1. All linemen block the men in front of them away from the play. A defensive man is considered "in front" when any part of his body is actually in front of the lineman. If no one is in front of or close to the lineman, he goes for secondary. If an opponent close to him can be reached, he hits him and continues on into the defensive backfield.

2. The first man outside the end is played as a defensive end. If there are two men outside the end, the second man is played as a halfback.

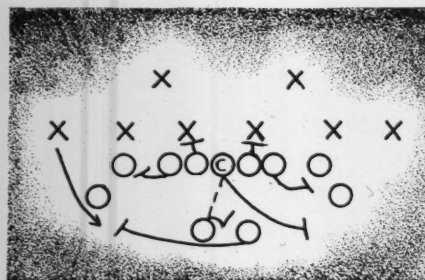
3. The center man in a five-man line is the one to be trapped.

4. The character of the secondary is determined by the direction of the play. The middle backer-up is always regarded as the center. The backer-up on the side the play is

being run is considered the fullback.

Norton likes to flood the flat zone quickly with pass receivers to open up the middle lane for a touchdown pass. He accepts the fact that under ordinary conditions these alley shots are dangerous. But he claims they are just as safe as any other pass if you have a man who will over-throw rather than under-throw.

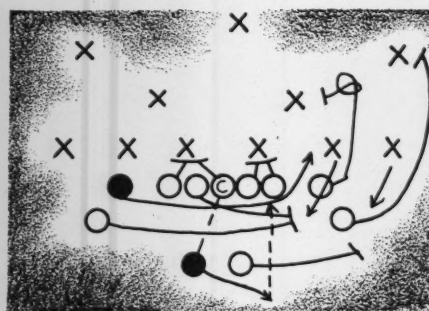
In discussing the receiving end of his forward passing game, Norton illustrated various finesses and escapes such as pivots, twists, dodges, loops, and changes of pace and direction. In many of these, the re-



Diag. 7, Pass Protection

ceiver came back toward the passer to shake off the defender.

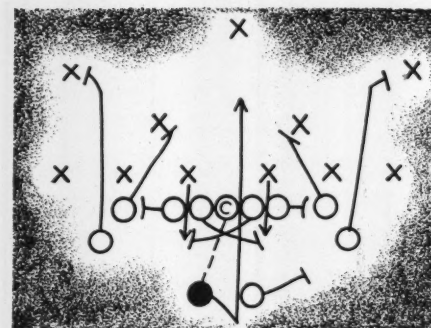
Diag. 6 shows several of Norton's pet escapes. In the first of these, two eligible receivers (the end and the wingback) race toward the halfback and cut in opposite directions, the passer picking out the free man after the half commits himself. For shorter passes, the receivers may gang up on the fullback as shown in the second maneuver.



Diag. 8, Shovel Pass

In the third escape, the end goes directly at the defensive man, starts out on an angle, turns and comes back for the pass. As a variation (next escape), he may start back but then make a complete loop and continue on again deep into enemy terrain. Or, after taking a step or two back, simply shoot out again.

Any forward passing attack, to be successful, must afford the thrower adequate protection. The coach must have several methods of protecting the thrower and confusing the enemy.



Diag. 9, Shovel Check

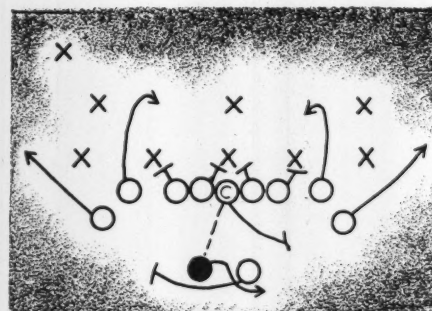
This may be accomplished, first, by occasional changes in blocking assignments. No block is any good unless you have some check on it. Second, by incorporating shovel passes into the play repertoire. Third, by fake shovel passes to all spots in the line. And, fourth, by delayed pass plays in which certain receivers delay their break and then suddenly shoot out into the open. This will make any team think twice about rushing too many men in at the passer.

Diag. 7 shows the Texas A. & M. basic offensive formation and the method they use to protect the passer. The center may pull out either to his right or to his left to get the end. When he swings out to his left, the blocking tailback blocks to his right.

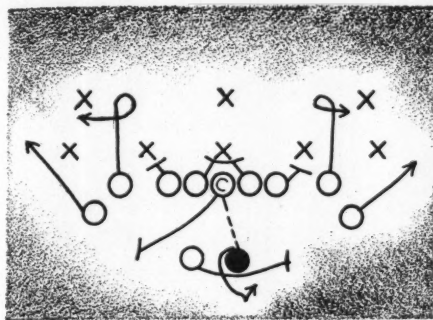
Diag. 8 outlines a shovel pass to the end which Norton uses as an integral part of his passing attack. The check play, which is also considered part of the aerial game, is shown in **Diag. 9**. Instead of forward passing or shoveling, the ball-handler runs up through the middle.

Rushing the passer, Norton declared, is the best weapon against passes, but there are different ways to do this to increase its effectiveness. He'll rush the passer with four men, not six, but by using four different men and changing the assignments he gets better results than he would by continually rushing all six. The ends always rush, but the other two men may come from anywhere and from any angle.

Norton believes the double wing-



Diag. 10, Pressure Pass



Diag. 11, Trailers

back will cope with any five-man line in the business. In **Diag. 10**, he outlines a pass that will put the pressure on the middle man. The offensive ends outflank the middle backer-up while the wingbacks suck over the outside backers-up, giving the middle man a handful and a headache.

In **Diag. 11** Norton uses the principle of a trailer. Both ends again go almost up to the middle backer-up but this time pivot out towards the sidelines, the pass going to the free man. The outside backers-up are again decoyed into the flats by the wingbacks.

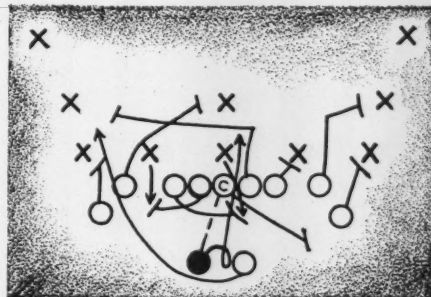
Diag. 12 shows how a delayed pass may be incorporated into the attack against a five-man line. A longer pass down the center than in the two previous plays, it is set up by shifting to a single wingback and sending one of the ends and the wingback into the flats. The other end shoots across over the middle backer-up's territory while the blocking back sneaks into the territory to the left of the defensive man.

The spinner up through the middle (**Diag. 13**) again places a tremendous burden on the backers-up. The middle man of the five defensive linemen is let through and mouse-trapped by the left tackle, while the backers-up are dealt with by the ends and the right guard.

Last year only eighteen points were scored against Texas A. & M. Norton attributes this good defensive record to a lot of "sound

screwy" defenses. These are, he said, not designed as temporary measures to bewilder the opponents, but have fundamental value to them since they are basically sound. Any vulnerable points in the line are covered by the secondary.

In operating an SS (sound screwy) five-man line (**Diag. 14**), there are three things the defense must do. First, they must force the opponents to the outside. Second,



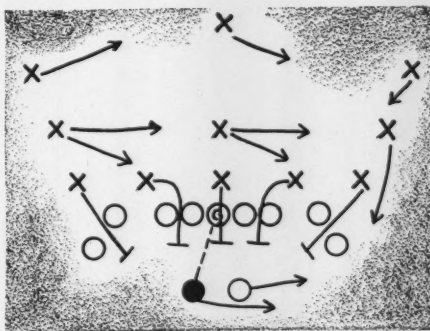
Diag. 13, Spinner

they must protect the inside, and, third, the line must charge.

This is done by having the three inside men charge through as a phalanx. The center man charges right over the center and the two adjacent men come through the offensive guards and tackles.

The ends drive through between the ends and the wingbacks, while the backers-up wait momentarily to see the play develop. The outside backer-up will then come up fast with the halfback behind him, if the play comes their way. The other two backers-up will also come across towards the play, with both on the alert for cutbacks.

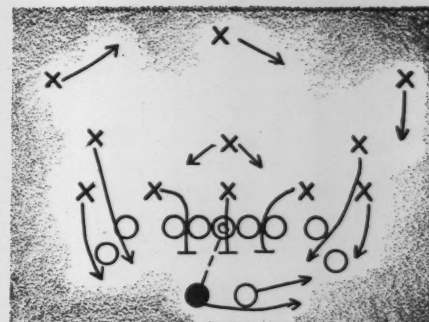
Diag. 15 shows another type of SS



Diag. 14, SS 5-Man Line

five-man line, in which the middle linemen attend to the same chores, the ends go in straight and the outside backers-up drive through between the wingbacks and ends, hitting either man on the way in.

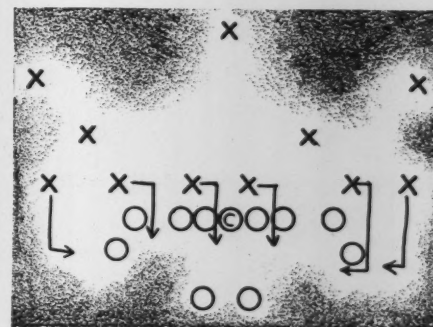
The SS six-man line defense (**Diag. 16**) is designed to give perfect balance all the way down the line, matching strength with strength. Upon command from the defensive quarterback, the whole



Diag. 15, Defensive Variation

line may take a complete sidestep either to the right or to the left. This type of sidestepping is particularly recommended by Norton as a precaution against being trapped.

A semi-normal sidestepping SS defense is outlined in **Diag. 17** in which, at a signal, part of the line

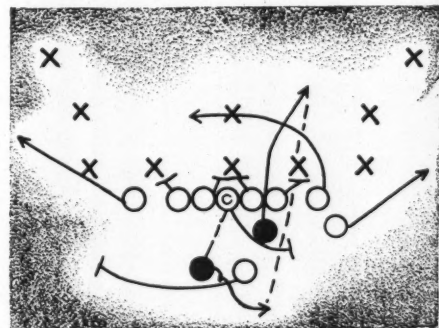


Diag. 16, SS 6-Man Line

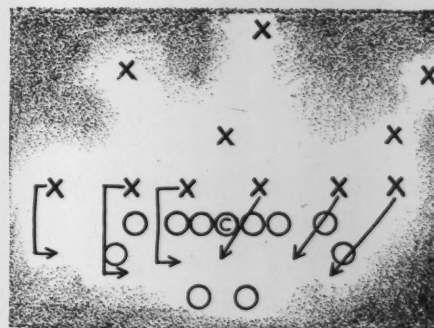
sidesteps to the right and charges in while the other side crashes as hard as possible toward the core of the play. The assignments may also be worked the other way round, with the left side of the line sidestepping and the right side crashing.

These screwy sound defenses are all numbered to eliminate guessing on the part of the defensive strategist. He calls 'em according to the book, which in this case happens to be a defensive chart covering the field.

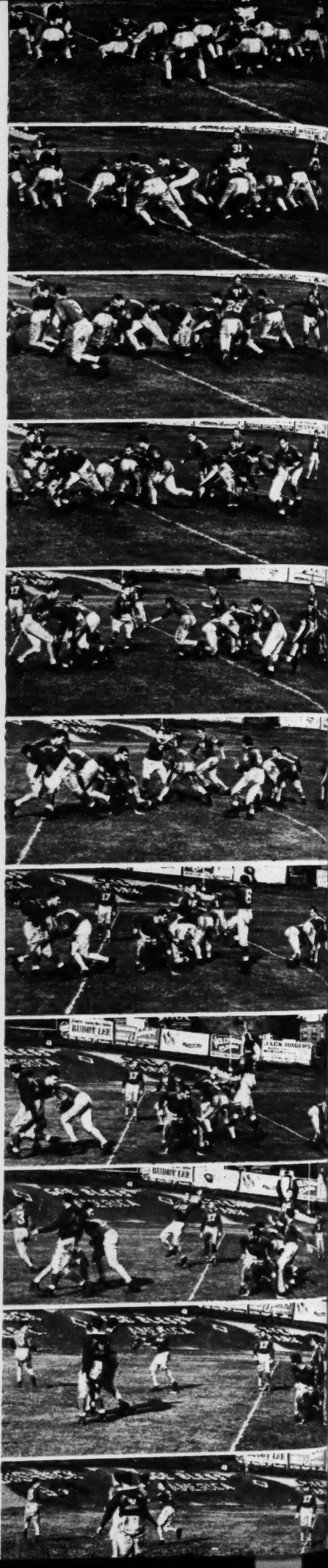
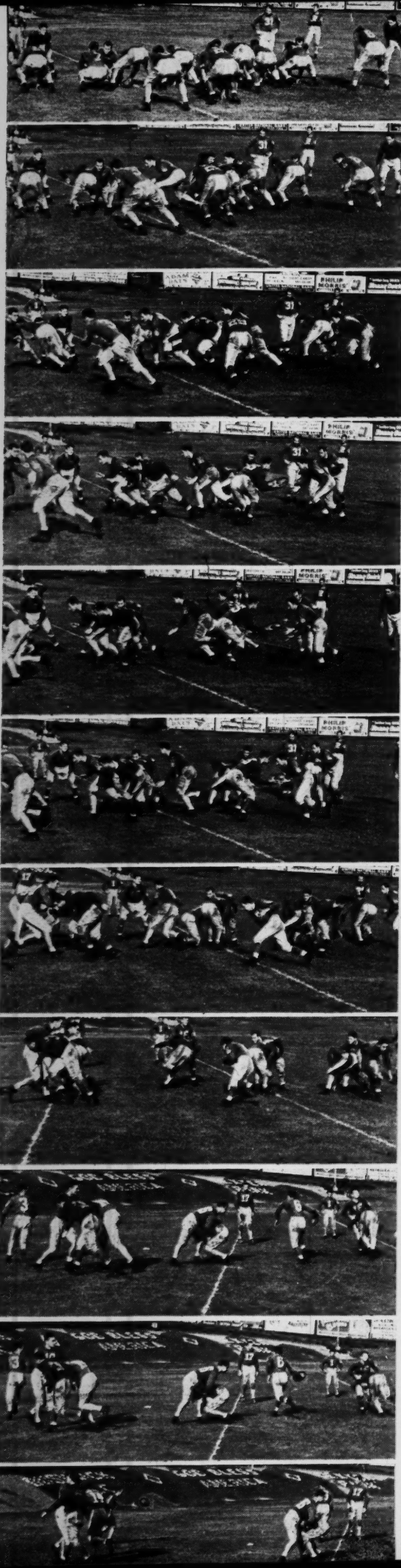
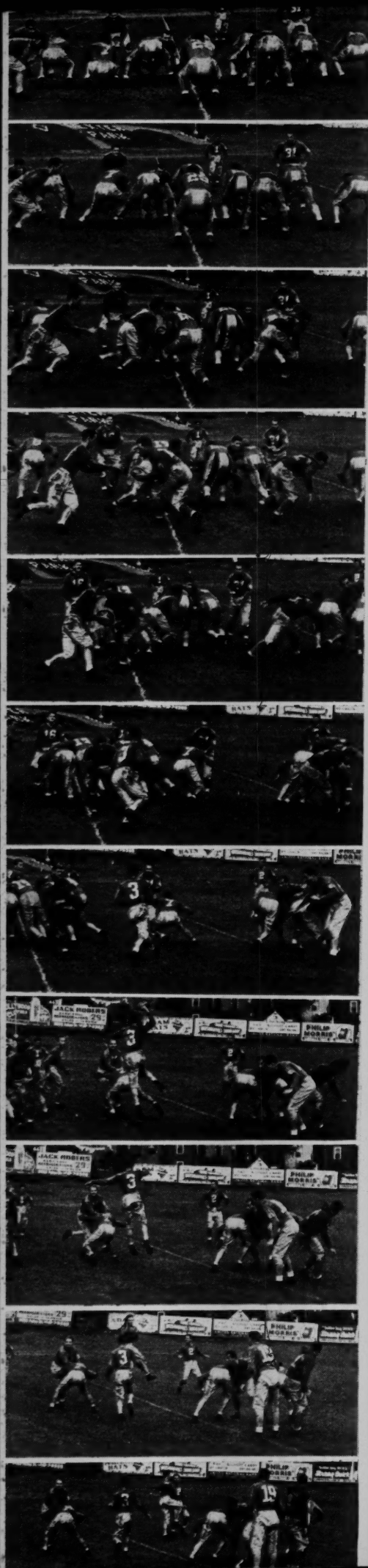
The field is divided into zones of ten yards, in each of which the defensive alignment depends upon the
(Continued on page 42)



Diag. 12, Delayed Pass



Diag. 17, Sidestepping SS



FORWARD PASS PLAYS

FROM LESS THAN FIVE YARDS BACK

By "Chuck" McGuinness

Charles "Chuck" McGuinness, coach of the Long Island Indians, powerhouse of the American Professional Association, explores a few possibilities of the National Federation and professional rule which permits the throwing of forward passes from any point behind the line of scrimmage. The diagrams come to life in the accompanying moving picture sequences, which were set up exclusively for "Scholastic Coach" by the author and his players.

AFTER seven years of practical application, there can be no doubt that the National Federation and professional rule permitting the throwing of forward passes from any point behind the line of scrimmage has opened up the game tremendously and made it more enjoyable for the spectator, the player and for the type of coach who isn't afraid to put his ingenuity to work to confound the opposition.

A new change in the code now permits two eligible pass receivers to handle the ball without waiting for an opponent to touch it. This

The plays in the diagrams come to life in the pictures on the facing page. From left to right, the first sequence shows how **Diag. 2** works, the second sequence illustrates **Diag. 3** and the third sequence **Diag. 4**. **Diag. 5** is illustrated on the next page.

opens up a wide avenue for a type of passing game bordering on volleyball. In short your ends or wingbacks can sort of bat the ball from the passer to the ultimate receiver in one motion. While I do not advise this as a general rule, I do believe that many passes will work better if the first receiver will not spend too much time with the ball.

Since most dump passes are "quickies" and do not result in long gains *per se*, the tendency to use them in connection with the lateral pass is growing. Coaches, however, should be on the alert against the development of that dread disease known as "Lateral Passitis." Promiscuous or spontaneous lateral passing is very dangerous. Both the passer and the receiver should have previous knowledge of the other's whereabouts. That is why I try to have my fakers go downfield and my blockers follow the ball in definite patterns. The carrier soon learns to know where to look for them.

When my Marblehead High School team played in the Miami Orange Bowl in 1934 we played under Florida rules which permitted passes

from less than five yards back. I had been scouting professional teams for the Boston Redskins' coach, Bill Dietz, and I knew what a buck dump was. To this we added the pass by the spinner man shown in **Diags. 5** and **6**. We won 52-12. Our "up" back ran over the head linesman on one or two of these laterals.

Since I believe that every "less than five" pass should be an outgrowth of one of your regular running plays, we are working now on a variation of the old naked reverse (**Diag. 7**). Every team runs off tackle, so we merely hand the ball to the waiting wingback who may pass it as shown, or give it to the opposite end on an end-around play.

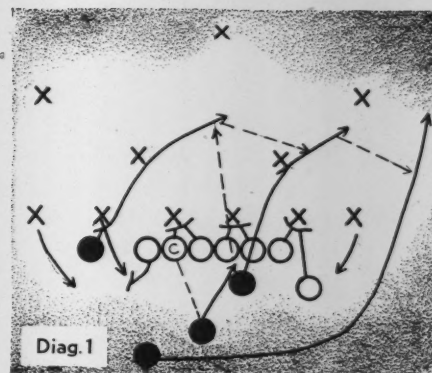
The important thing in building this type of attack is to make your dump passing conform to your style of running game. **Diag. 1** outlines the standard dump pass which evolves from a buck into the line by the fullback. Nearly every professional team uses the play as shown. The pass is thrown either to the left end or to the left halfback in the flat to the right of the passer. If the end gets the ball he may lateral pass to either the "up" back or to the left half.

The reason this dump is not as potent a weapon as most experts thought it would be when the "less than five" rule was written into the book is simply that most of the good bucking fullbacks are not very good passers. The execution of the play requires the fullback to make a real low running threat at the line, then rise up and pass softly to the eligible man just beyond the backers-up.

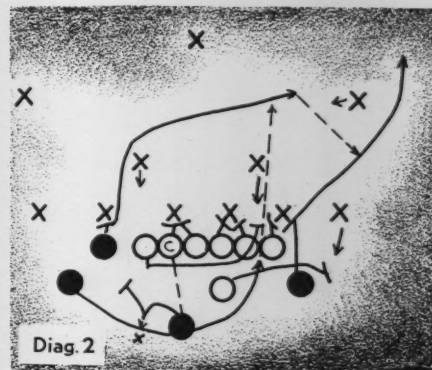
The "up" (blocking) back on this play should take the defensive fullback with a head-on block, driving his head into the full's mid-section.

Diag. 2 is a type of inside reverse dump pass. In the basic reverse the left half gets the ball from the full and carries the reverse inside the defensive left tackle.

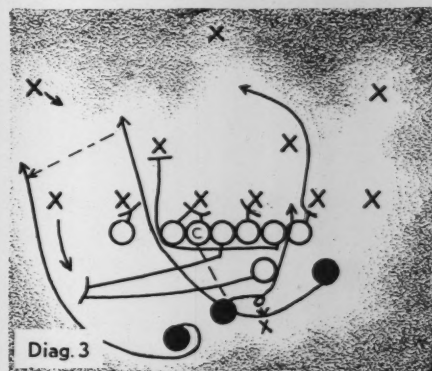
On the dump pass the ball is thrown from a point near the line of scrimmage by the ball-carrier. The left guard comes around and stops low just inside the hole on the line of scrimmage. The passer can go up to him but no farther. The right half counts three while helping his end with the defensive tackle, then goes out flat to take the lateral from the left end who catches the ball just back of the defensive fullback.



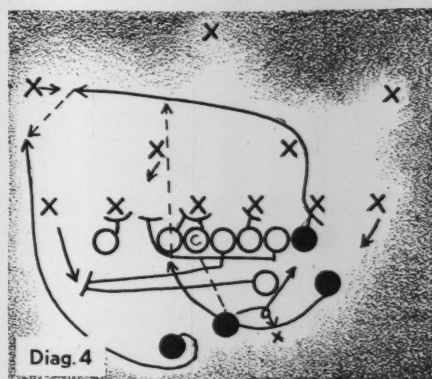
Diag. 1



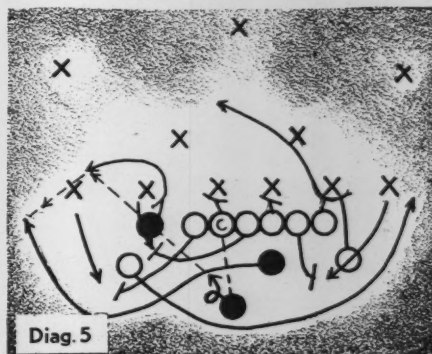
Diag. 2



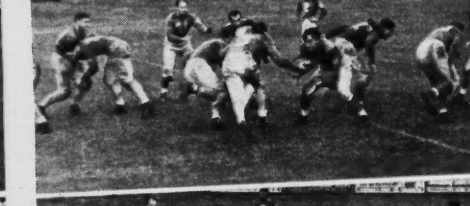
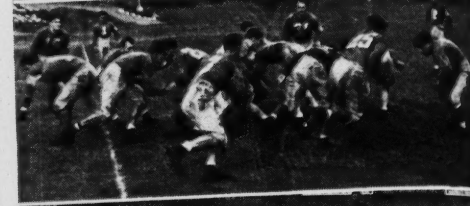
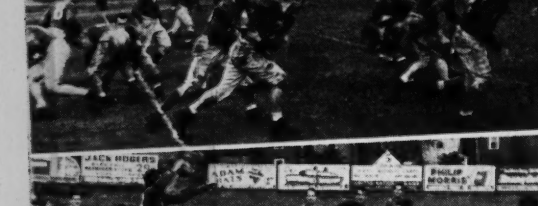
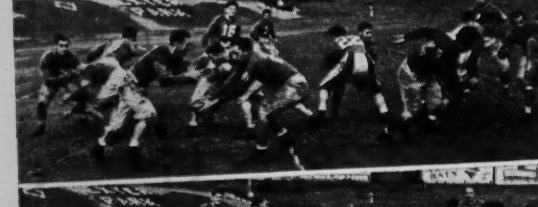
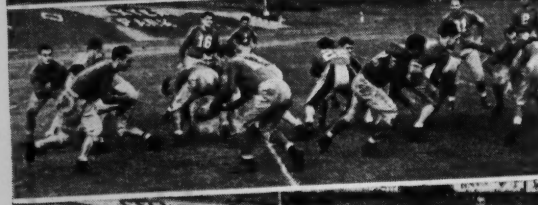
Diag. 3



Diag. 4



Diag. 5



This play has more possibilities than the dump by the fullback. In the first place the ball is thrown by your passer. Secondly, most single wing and all double wing teams use reverses of this type.

In **Diag. 3** we have the single reverse to the weak side with the full giving the ball to the right half and continuing his fake inside the defensive tackle. This fake keeps the defensive full "honest."

On the inside dump from the reverse (**Diag. 4**), we find that unless the passer is left handed it is best to use a two-handed basketball chest pass, tossing the ball just over the defensive center's head. Here again the outside tackle runs into the hole and blocks low. The passer should stop short of this man.

When this play comes out of a single wing, the left half should turn first to his right and then go as shown. In a double wing alignment the left half is a wingback. He must block out the tackle for three counts and then go flat for the lateral.

Diag. 5 is probably the strongest of the "less than five" passes. In many of our plays the fullback is

Diag 5 (on page 11) comes to life in the first sequence, Diag. 6 in the second and Diag. 7 in the third, running from left to right. It is interesting to note how closely these plays resemble one another and how effectively they may be worked in sequence.

given the option of giving the ball to the faking halfback or keeping it and going through the line. We find that if the fakers do not know when they are going to get the ball they will always make a good fake for it.

In this pass the fullback fakes the ball to the left half and passes it just back of the defensive right end to our left end. The ball is then pushed or lateraled to our "up" back.

After trying this short pass a few times, the thing to do is to toss the ball over the defensive center's head to the right end. In this contingency the left end should go to the same spot and fake a catch to draw the center up.

Since nearly every single and double wing team snaps the ball to the fullback for spins and half spins in which he may give or fake the ball, it is a good idea to work in a pass off a spin. The play has a better chance of working if no pressure is put on the full before passing. A hard drive into the line may upset his equilibrium and destroy his accuracy. Passes which come on the tailend of a spin are not dangerous as they have ample coverage.

In the pass to the right end (**Diag. 6**), the man should not go past the

line of scrimmage or beyond the spot on which the defensive end lined up. The left end should go just back of the defensive full to give the passer an option.

Under the new rules it is possible for the receiver to bat the ball. In other words, the receiver does not have to catch the ball outright. He may catch and toss to the "up" back in one motion. After passing to the end once or twice, it is a good idea to cross the opponents up by tossing the ball to the left end behind the defensive full.

Four years ago I started using the naked reverse with the right half waiting for the ball, then running deep and alone wide to the weak side. In recent years I have developed a series of plays involving an end-around and a series of passes thrown by the right half from a spot not over two yards behind the scrimmage line.

Diag. 7 shows one of these pass plays. The left end goes straight down the field for ten yards, turns back towards the passer and gets the ball as shown. He may then lateral pass to the left guard, who has pulled out and swung around to the opposite side.

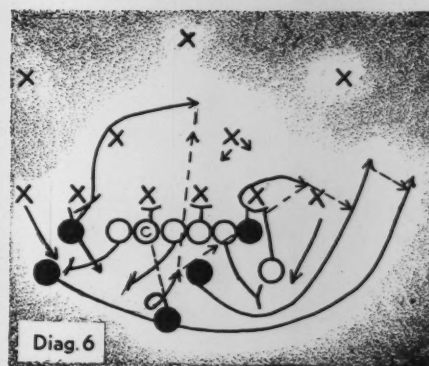
With the exception of the basic dump pass (**Diag. 1**), all of the plays discussed thus far are shown in the accompanying moving picture sequences. The plays that follow are not illustrated but have been found to be equally as effective against all types of opposition. Like the others they depend for success upon swiftness, deception and carefully timed assignments.

Diag. 8 is a multiple choice type of play I have used successfully during the past five or six years. Only the fullback knows who will get the ball after he takes the snap. We do not tell anyone on the team who the actual carrier will be.

If the full thinks the end will crash he gives it to the "up" back. If he thinks the tackle can be moved, he gives to the left half. He himself can keep it and plunge or pass to the left end as shown.

The idea in **Diag. 9** is to develop the play so that if your end runner is trapped before he gets beyond the line of scrimmage he always knows that the farther-removed end has gone past the safety man and is in position for a pass.

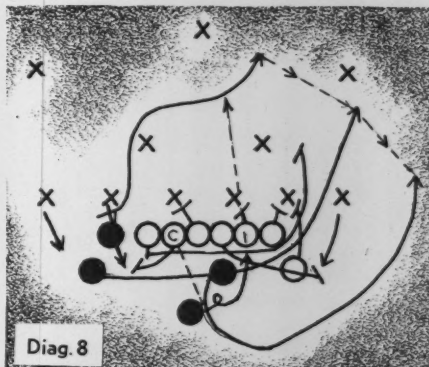
Diag. 10 is a cleverly concealed pass from a modified double wing formation with the tailback six yards back. The defensive center normally will cover the flat and the defensive fullback the right end, giving the left half (wingback) a chance to sneak into the alley.



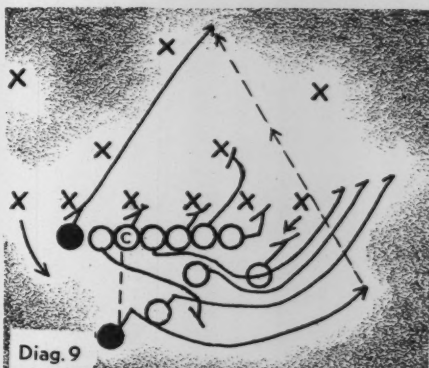
Diag. 6



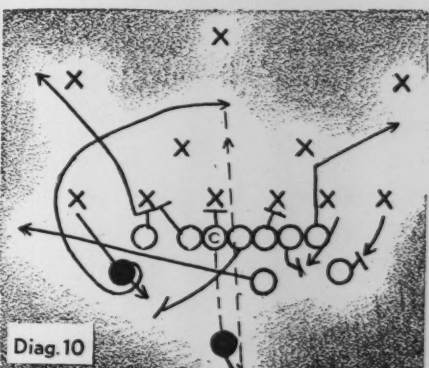
Diag. 7



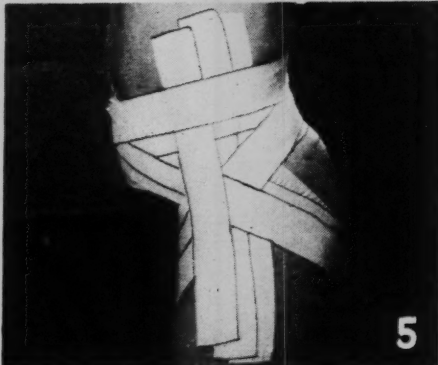
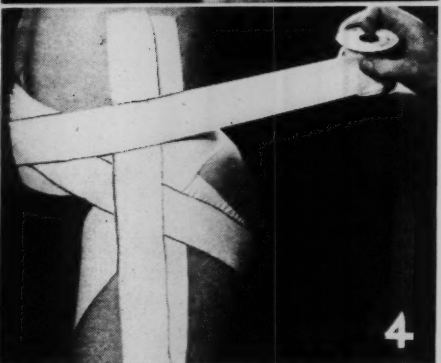
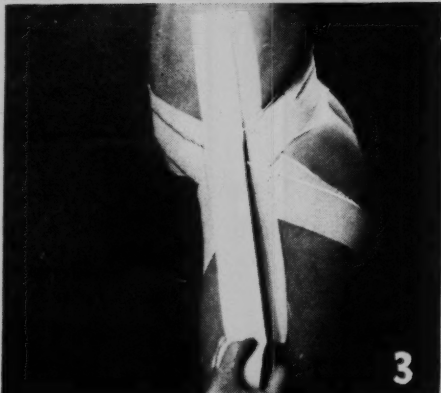
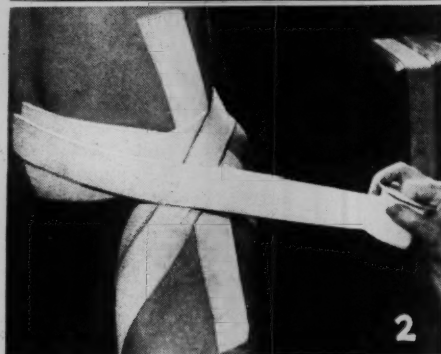
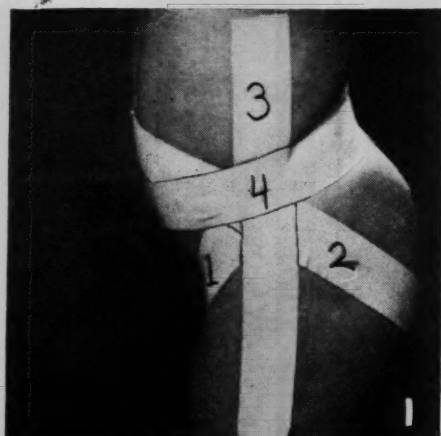
Diag. 8



Diag. 9



Diag. 10



TAPE SUPPORTS

FRANK KAVANAGH, Cornell University's famous trainer, set these pictures up exclusively for *Scholastic Coach* as part of a series of tape supports for athletic injuries. Last month Mr. Kavanagh showed how to build up two braces for the ankle and a support for the knee. In these pictures he illustrates the correct method of taping an injury over the hip joint and an injury to the lower back.

Left: Hip Joint

WHEN hip pads are incorrectly worn or have slipped down from their proper position, a direct blow to the area on the side of the trunk between the ribs and the pelvis may severely injure the part. After treating with heat and rest, the injury should be immobilized with an adhesive tape bandage.

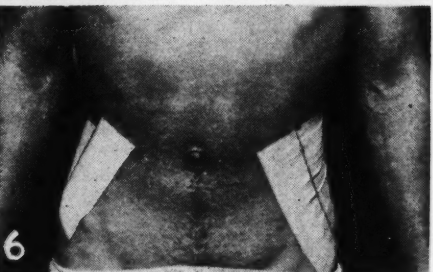
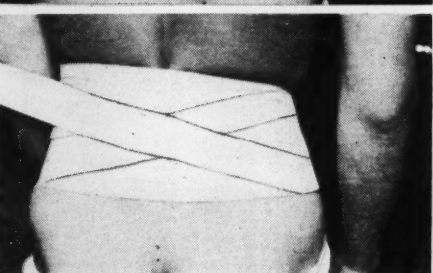
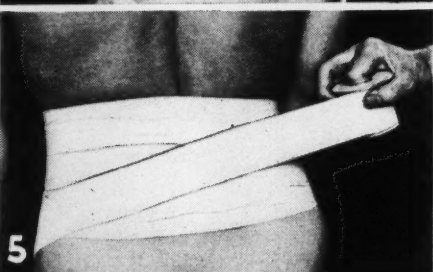
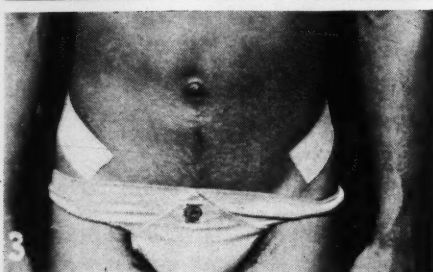
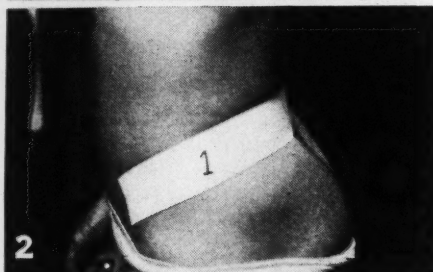
In this particular support, twelve strips of two-inch tape are applied with strong pressure as the athlete stands leaning slightly toward the trainer. The first picture shows the four original applications. The diagonal strips (numbered 1 and 2) originate at points about midway on the back and front of the trunk and insert well down on the inside of the thigh and buttock, respectively. Number 3 is a vertical strip running straight down the side of the trunk, and number 4 a horizontal strip which runs from a point low on the abdomen to the small of the back.

Three layers of each of these strips make up the brace, each overlapping the other about halfway. The second picture shows the application of the sixth strip, which overlaps the second; the third picture the application of the seventh strip; the fourth the eighth strip; and the last picture shows the completed bandage.

Right: Lower Back

THIS brace for the lower back consists of five parallel, overlapping layers and two cross-strips of two-inch tape. As the athlete stands with his feet everted, the trainer draws the first strip from a point over the crest of the ilium across the back to an identical position on the opposite side of the hip. The next four strips are applied similarly in overlapping fashion.

In the fifth picture, a cross-strip is applied from the origin of the first strip to the insertion of the last. A similar cross-strip is applied next, running in the opposite direction, and the bandage is then capped off with two anchorages over the loose ends.



Multi-flash camera analyzes the one-hand lay-up shot. Shows Nat Holman, C. C. N. Y. Coach and President of the National Association of Basketball Coaches.

Keeping the hoop hot.....

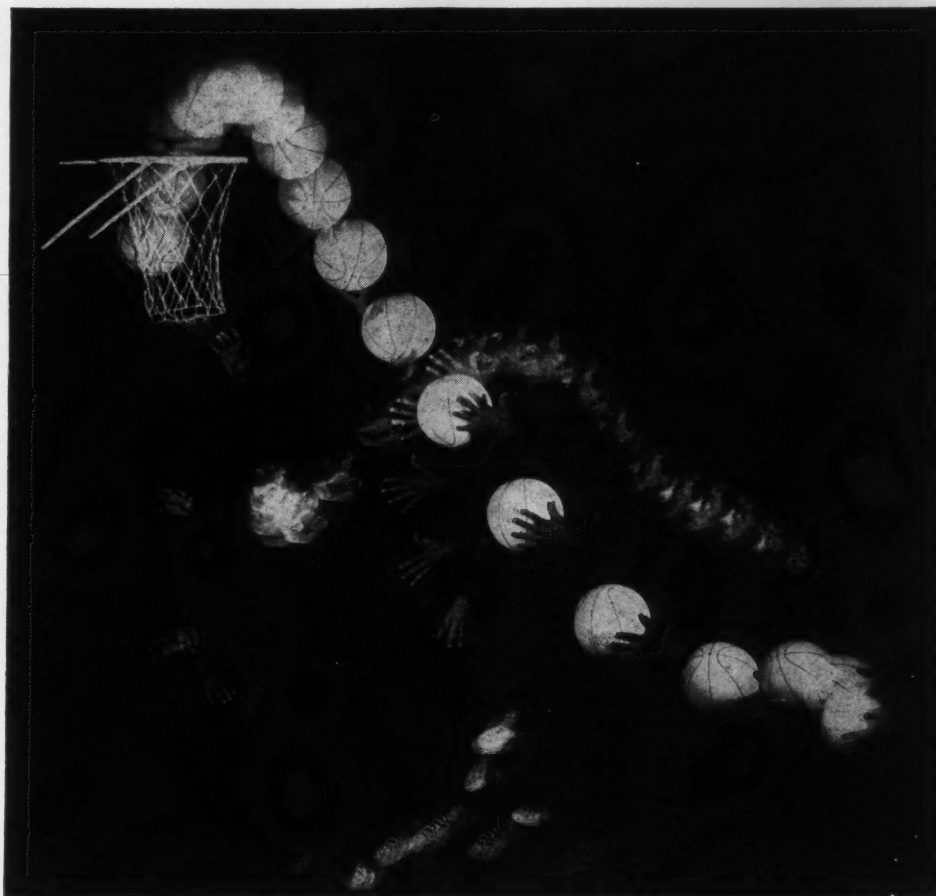
• What's this — a coach's dream of a scoring spree? Right! Or, putting it technically, a stroboscopic, multi-flash photo of the SPALDING Top-flite Basket Ball going through its paces at the Spalding Research Laboratory.

Scientific studies like this helped perfect this ball of amazing accuracy and true rebound. Last-built to insure absolute roundness. Seamless, with molded Channel Grooves for easy, finger-tip control and to guide the ball straight to its target.

In every test of shooting, ball handling, long-life, it's first with the first teams of the nation. Your Spalding dealer carries Spalding Official basket balls for every size budget.

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BASKETBALL EQUIPMENT



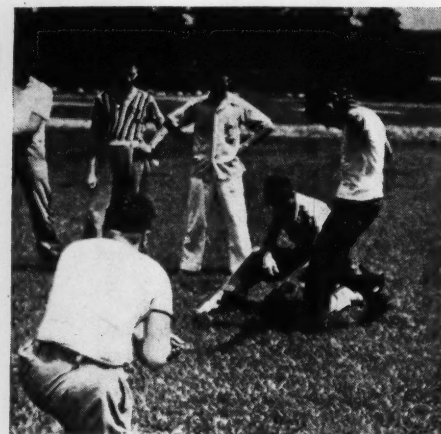
The Basket Ball with built-in balance



SPALDING



POSITIONS from which to determine whether or not: (left) toe is contacting ball properly; (center) balance foot is



pointed correctly and kicking leg is straightened out at completion of follow through; and (right) spacing is correct.

The Mechanics of the Scoring Kicks

By Arnold A. Fenton

The Reverend Arnold A. Fenton, rector of Christ Church in Ansonia, Conn., follows up his September article on controlled punting with an analysis of the scoring kicks. The "kicking parson" was a close friend of the late LeRoy N. Mills, the greatest kicking teacher of them all, and is now carrying on with his hobby—instructing high school and college players how to kick a football.

IF OUR current crop of place and drop kickers are not booting 'em over the crossbar the way they used to in the old days, it is not because they lack a certain knack for the art their predecessors possessed.

The scoring kick is not, and has never been, a highly complex art. The basic principles of this kick are the same as for the punt. Any boy who can punt a ball with good balance and timing can, with proper grounding and practice, be developed into an accurate place and drop kicker.

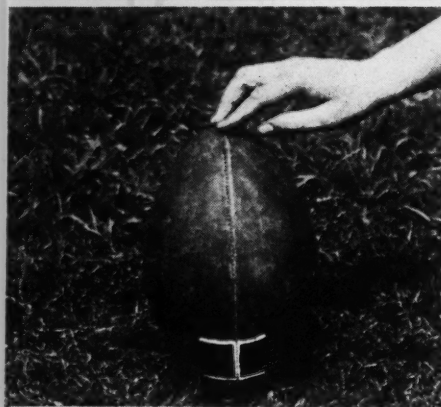
The fault, it would seem, lies more with their coaches. Most of our football teachers are just not devoting the time they should to the scoring kick. And you cannot reap where you have not sown.

A study of the mechanics of the drop and place kicks will reveal that the basic principles of kicking bear in almost the same degree on these kicks as they do on the punt.

The place kick

In the place kick, the holder is as important as the kicker. He is responsible for many kicks which go wrong. He should always be rehearsing his role: the correct stance, handling the ball from center and putting it down on the spot designated by the kicker. The farther

BELOW (Top): Correct way of lining up and aiming the kick. **(Bottom)** The chalk lines demarcate the area in which contact should be made. Ball should not be met above or below these extremities.



back he tilts the ball, the longer it will travel.

There are various stances which the holder may use. In the most commonly accepted of these, he gets down close to the spot on which he is going to place the ball. As the

accompanying picture shows, this stance affords the best body control and still allows the maximum flexibility in stretching out to get a poor pass from center.

The holder applies a very slight pressure on the tip of the ball with his fingers so that it will be firm for the kicker. His arms and hands are relaxed to avoid fumbling.

The wise coach will train two or three boys to hold the ball. Should the regular holder be injured or substituted for, he will thus have an experienced hand to steady the ball for the kicker.

The center should snap the ball back with average speed on a line about one and a half feet off the ground. Split-seconds are thus saved in getting the ball to the ground. The center should practice until he becomes expert at feeding the ball directly into the holder's waiting hands. Poor centering has spoiled many a kick.

The kicker, having the cooperation of the holder and the center, can now put his foot into it. Prior to the snap, he marks a cross or a spot on the ground where the holder is to place the ball, on a direct line with the ball now resting under the center.

He then steps back and lines up this spot with a point about one yard to the right of the dead center of the goal-posts to allow for his natural pull to the left. (We assume the kicker is right-footed. The left-footed kicker selects a point one yard to the left of dead center.)

If a stiff cross-wind is coming from the left, the kicker need not make any allowance for the pull. The wind will neutralize it for him.



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FOOTBALL BULLETIN

Officials' Signals



PUSHING MOVEMENT OF HANDS TO FRONT WITH ARMS HANGING VERTICAL — Illegal crawling, pushing or helping runner.



PUSHING HANDS FORWARD FROM SHOULDERS WITH HANDS VERTICAL — Interference with forward pass (also pass which touches ineligible player).



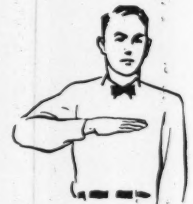
HANDS ON HIPS—Off-side and violation of kickoff formation.



BOTH ARMS EXTENDED ABOVE HEAD — A score. Bringing hands together after signal indicates safety; shifting of hands in vertical plane above head, time out. Timekeeper answers signal by raising his right hand.



GRASPING OF ONE WRIST—Holding.



HORIZONTAL ARC OF EITHER HAND — Player illegally in motion.



MILITARY SALUTE — Unnecessary roughness.



WAVING HAND BEHIND BACK —Illegal forward pass.



SHIFTING HANDS IN HORIZONTAL PLANE—Penalty refused, incomplete pass, play to be replayed, missed goal, etc.



FOLDED ARMS—Delay of game or extra time-outs.



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Should the wind come from the right, he should make more than a yard allowance.

So far we have been assuming that the kicker is trying for the extra point. On field goal attempts from a greater distance, it is necessary to make a little more allowance for the pull.

Directly back of this point (one yard to the right of dead center), there usually is some object — a portal, a pole or something else, perhaps, which the kicker may use for a target. After sighting it, he should carefully draw a line with his cleats from the spot of placement back to the point from which he will start. This gives him a straight line on which to kick, a line which runs true from his starting point to the target beyond the crossbar.

Spacing is as important for the place kicker as it is for the broad jumper. With experience, the kicker will learn just how far back to go in order to make a perfect approach.

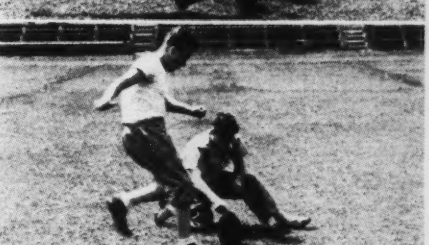
As he comes up to the ball, the balance foot should be on a line with the ball. If the balance foot falls short, his spacing is too long and he will have to reach for the ball with his kicking foot. If the balance foot goes beyond the ball, he will "flub" his kick, that is, go too far over it. His spacing is now too short.

His stance is the same as for a punt. The kicking foot is slightly ahead of the balance foot and the body is lowered to get it under the ball. The kicking foot is placed at the beginning of the line he has made with his cleat.

The target is sighted just before the ball comes back. From that point on, he must not look up. His eyes should *never* leave the ball.

The kick begins with a short half-step forward on the kicking foot, then a full and natural step forward on the balance foot, pointing it directly at the target. If the balance foot points off in any other direction, the chances are the ball will miss the uprights.

The toe contacts the ball about two inches from the bottom (never more than four) in the dead center. The toe is turned up a trifle and the cleats barely scuff the ground. There



is a complete follow through, with tension in the kicking leg and a straightening out as the follow through nears completion.

During the kick, the balance foot is held rigidly on the ground. At the finish the kicker steps through. He does not fall back. Both feet should now be pointed straight at the target. If they are, the kicker has probably taken good aim.

The body should not be turned or twisted. Keeping the balance foot planted solidly on the ground will prevent the body from turning. The kick should never be a stab or a smashing blow but rather an even and sustained sweep or follow through.

The drop kick

The drop kick is essentially the same kind of kick as the placement only, whereas in the place kick the ball is propped by the holder and scooped up off the ground, in the drop kick it is released by the kicker and kicked just as it begins to rebound.

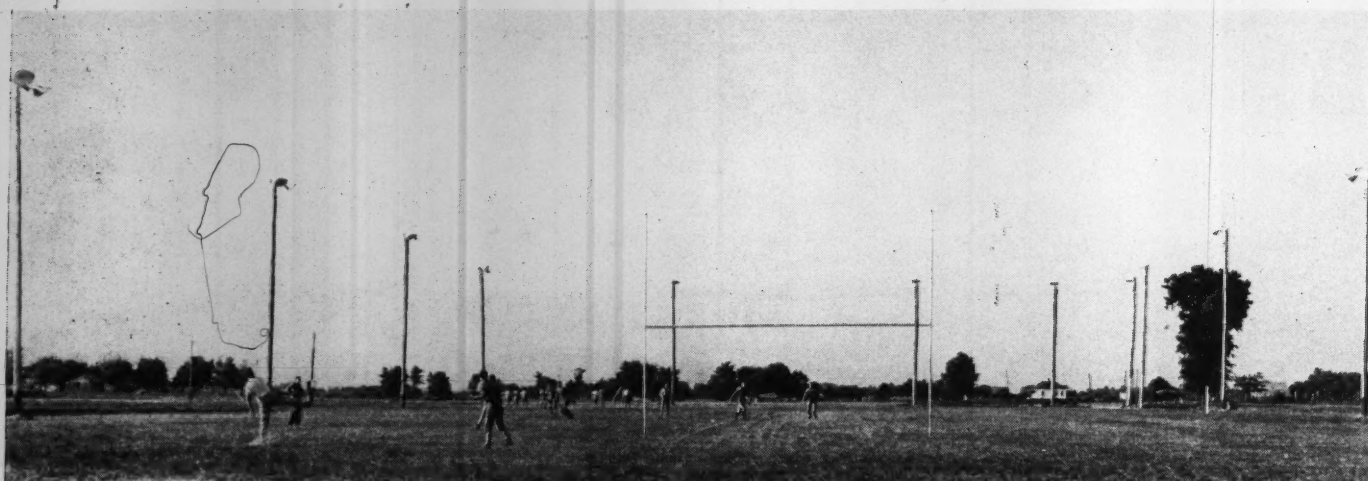
There is a great deal of prejudice against the drop kick, which probably explains why we have seen so little of it in recent years. Yet it is the most fascinating of all kicks to watch. I find that most boys would rather drop kick than do anything else.

Most coaches object to the drop kick because it is slower than the place kick. However, the fraction longer it may take to get it off is counter-balanced by the extra man it sets free to block. It eliminates the holder, one of the "too many cooks" who may "spoil the broth."

Good drop kickers are apt to be more accurate than place kickers. So if you have a good drop kicker do not try to change him over to a place kicker. The drop kicker gets more height to his kicks, making them harder to block.

The stance, spacing, pointing of the balance foot, contact, eye concentration, and follow through are the same as in the place kick. The only difference is the dropping of the ball and the timing.

(Continued on page 32)



LIGHTS FOR THE SIX-MAN FOOTBALL FIELD

By Howard E. Moorman

The dual six-man football-softball floodlighting layout at Valier, Ill., is a testimonial to community cooperation and planning. At least a half dozen agencies dug into their pockets to raise the necessary funds and to contribute much of the material and machinery. Howard E. Moorman, director of athletics at the Valier Community High School, gives a brief description of the layout and the story behind it.

UNDoubtedly there are coaches of six-man football who would like to play their games at night on a lighted field, but because of a limited school budget content themselves with just *liking* the idea. In some schools, the thought of a floodlighting plant may actually be beyond any hope of realization. But in others the opportunity is there waiting for a man with imagination to capitalize on it.

In these places, the men in charge of athletics usually have not explored every avenue of approach. How many of them, for example, have thought of calling in the community and selling them the idea? It can be done. Valier, Ill., for one, did it.

If Valier had waited until the school itself acquired sufficient funds to launch the project, the dual six-man football-softball night plant it now boasts would still be an afternoon play field and nothing more.

Valier is a coal-mining town whose citizens are not exactly rolling in wealth. Hence, D. H. Webb, principal of the Community High School, and the writer, after toying with the idea for months, came to the conclusion that the only way to obtain a floodlighting layout was to call on the whole community for assistance.

The first step was to secure the

backing of a "booster," some strong civic organization, and convince them of our need. Being members of the local Lions Club, we approached them first. We did not have to look any further. They gave us their enthusiastic support.

The high school board of education contributed \$350 to the cause and the grade school board soon followed with a donation of \$200. The latter's interest in the project was partly due to the fact that the field lies behind their building, thus making them a co-owner and insuring future benefits.

The local coal company then came through with a \$50 donation and the balance was completed by popular subscription, the contributions ranging from three cents to five dollars.

We started the project with only football in mind, but later an additional layout for softball was proposed. Since all the neighboring towns have strong Lion Club and independent teams which are al-

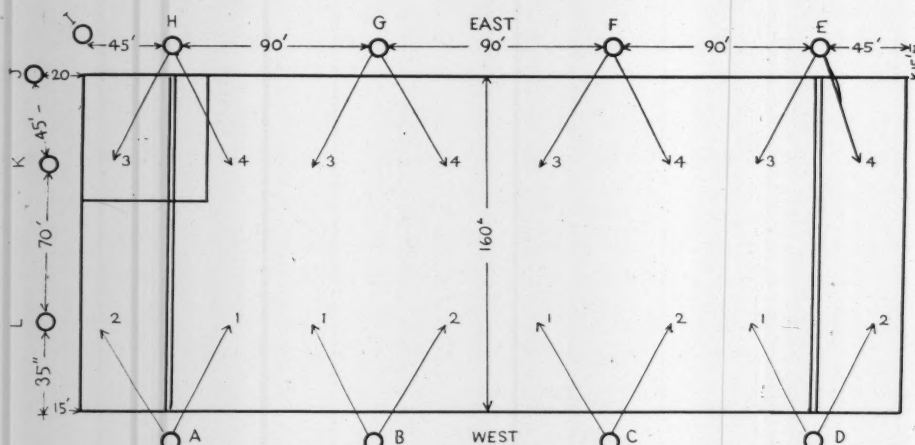
ways tangling in tournaments, it was inevitable that the game should catch on in Valier. By adding four extra poles to our six-man layout, we laid out a softball field for night games. In the spring, it is possible to reverse the lights for night track and field meets.

There are two units to a pole. Each unit is comprised of one VD50 type reflector containing two 1500-watt bulbs, or 3000 watts in all. For football, we have eight poles spread 90 feet apart, four on each side of the gridiron. The 48,000 wattage we get provides excellent lighting.

For softball, a very well lighted field is obtained with only 30,000 watts. The bulbs are left out of units D1 and F4 (see diagram), unit E4 is transferred to pole I, the E3 unit goes to pole J, G4 goes to pole K, and H4 goes to pole L. All units remain on their original circuits.

Circuit 2 is never used for softball. The value of having four cir-

(Concluded on page 33)



SIX-MAN FOOTBALL-SOFTBALL NIGHTTIME LAYOUT: The Valier floodlighting system operates on four circuits, numbers 1 and 2 on the west side of the field and 3 and 4 on the east. The softball diamond overlaps the gridiron in the end zone.



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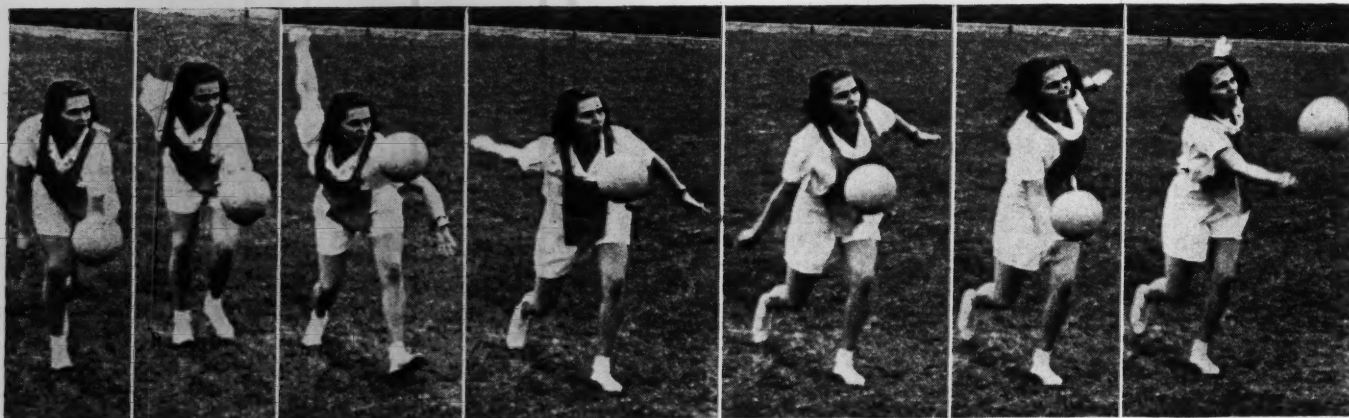
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INDIVIDUAL VOLLEYBALL SKILLS

By Josephine Burke

Miss Josephine Burke, of the department of physical education at Hunter College of the City of New York, and a member of the national Sub-Committee on Volleyball for girls and women, passes along the first of a series of two articles on volleyball techniques.

THERE is more to the game of volleyball than the mere tapping of a ball back and forth over a net. When played correctly, every move is more or less predetermined. Individual skill must be highly developed and coordinated with team play.

In contrast to the haphazard organization of the purely recreational game, where the players are only interested in hitting the ball over the net whenever it comes within hitting range, the competitive game demands the same kind of training and coaching as that of the other intensive games.

The fact that the volleyball is extremely light makes its handling quite deceptive. The slightest external force causes it to deviate from its course, and none but the most skillful can handle it with ease and accuracy.

A good server can make the ball

behave in a most peculiar manner. In fact some of the more expert can put enough "hop" on their serve to score an occasional ace. The ball seems to come curling over the net and then abruptly shoots down. The receivers have their hands full getting under the ball, much less passing it to a booster.

There are about as many types of serves as there are players, each girl having her own peculiar twist or frill. The easiest and surest serve (and naturally the easiest to return) is the underhand type.

Being an easy ball to control, it is most effective for placements. The player stands behind the end line at the right-hand side of her court in a position facing the net. The body is slightly crouched and relaxed with the feet in stride position a few inches apart. The ball is held in the palm of the left hand, fingers pointing to the right and the thumb forward.

As the ball is tossed a few inches up into the air, the right arm swings backward and the left foot starts coming forward. The forward action of the arm is not unlike that of a

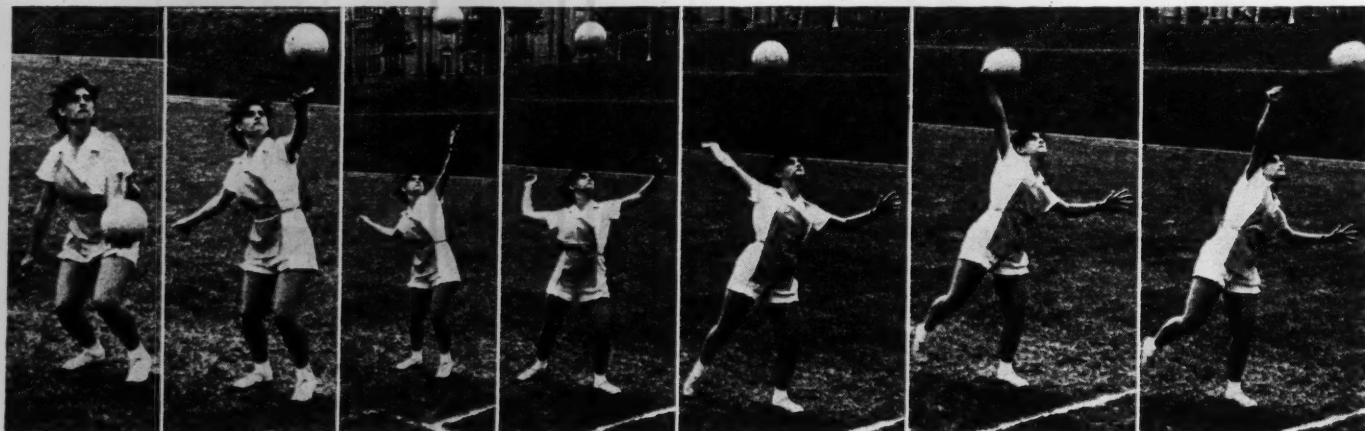
softball pitcher. As the arm comes down and across for the stroke, the weight shifts forward. The bend in the right knee is quite pronounced.

The ball may be struck with either an open or a closed hand. Many coaches prefer the open hand as the fingers are very instrumental in giving direction. After contact is made, the arm follows through. The hips are raised and the back slightly arched, giving power to the stroke. As soon as the ball is on its way, the server should return to her position on court.

The overhand serve has an advantage over the underhand in that the speed behind the ball makes it a difficult proposition to return, pass or set up. Of course it, too, must be well placed to be effective.

The overhand serve is really a smash, the force behind it being the secret of its effectiveness. In execution it bears a close resemblance to the tennis serve.

The player stands in the serving position with her feet about ten inches apart and parallel to the end line. The knees are slightly bent and the ball held at about hip height. As





shown, the ball is tossed about five feet high directly over the head (not forward).

The right arm goes back with the forearm bent and pointing slightly upward. The eyes never leave the ball.

As the ball descends, the right arm comes forward and a half-step is taken with the left foot. The weight shifts from the right to the left foot, and the ball is contacted at a point a little higher and to the right of the head. Either a partially closed hand or a fist may be used for striking purposes.

During contact the right leg straightens and the body twists slightly to the left, throwing the right shoulder forward. The follow through of the arm and the body aids in directing the ball. As in the underhand serve, the player should then immediately return to her position on court.

Handling the ball

The ability to handle the ball correctly is the cornerstone of successful teamwork. Every player should learn how to handle the ball easily and accurately and to keep it in play after it has been served.

The balls usually come at three levels: high, chest level or low. Each type requires a little different han-

dling to direct it over the net or to pass it to a teammate.

In playing a high ball, it often is necessary to leave the ground. The knees and the hips are first bent to insure a good pushoff. As the ball floats within hitting range, the body is projected toward it. The arms are whipped forward with the palms turned up, the thumbs pointing in and the fingers slightly flexed. In this position the hands form a pocket into which the ball should land.

The knees straighten out and the ball is contacted almost an arm's distance in front of and above the head. The fleshy parts of the ten fingers establish contact, the wrists snap forward and the ball is sent back from whence it came. In the follow through the arms straighten out.

In handling a low ball, it is necessary to get both hands underneath it. The timing of this play is important as a split-second delay may spell the failure of the return. The body is crouched with the left foot in advance and the knees well bent. The arms are extended forward, flexed at the elbows, with the palms turned up and the fingers spread.

When the ball strikes the fingers, the shoulders go back and the arms lift the ball.

The correct execution of these

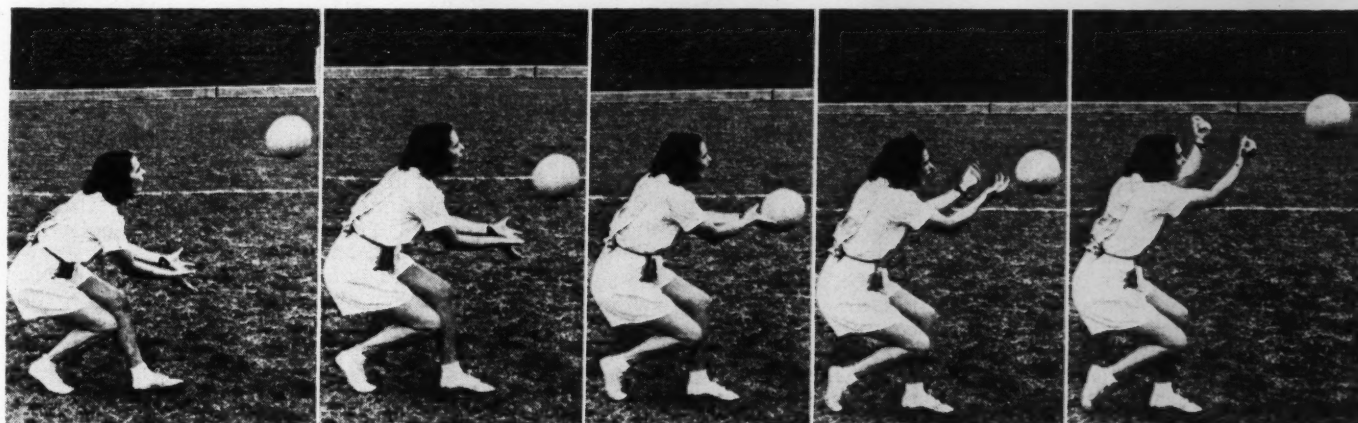
fundamentals should be part of every player's game. Once they are mastered, it is easy to perfect team play.

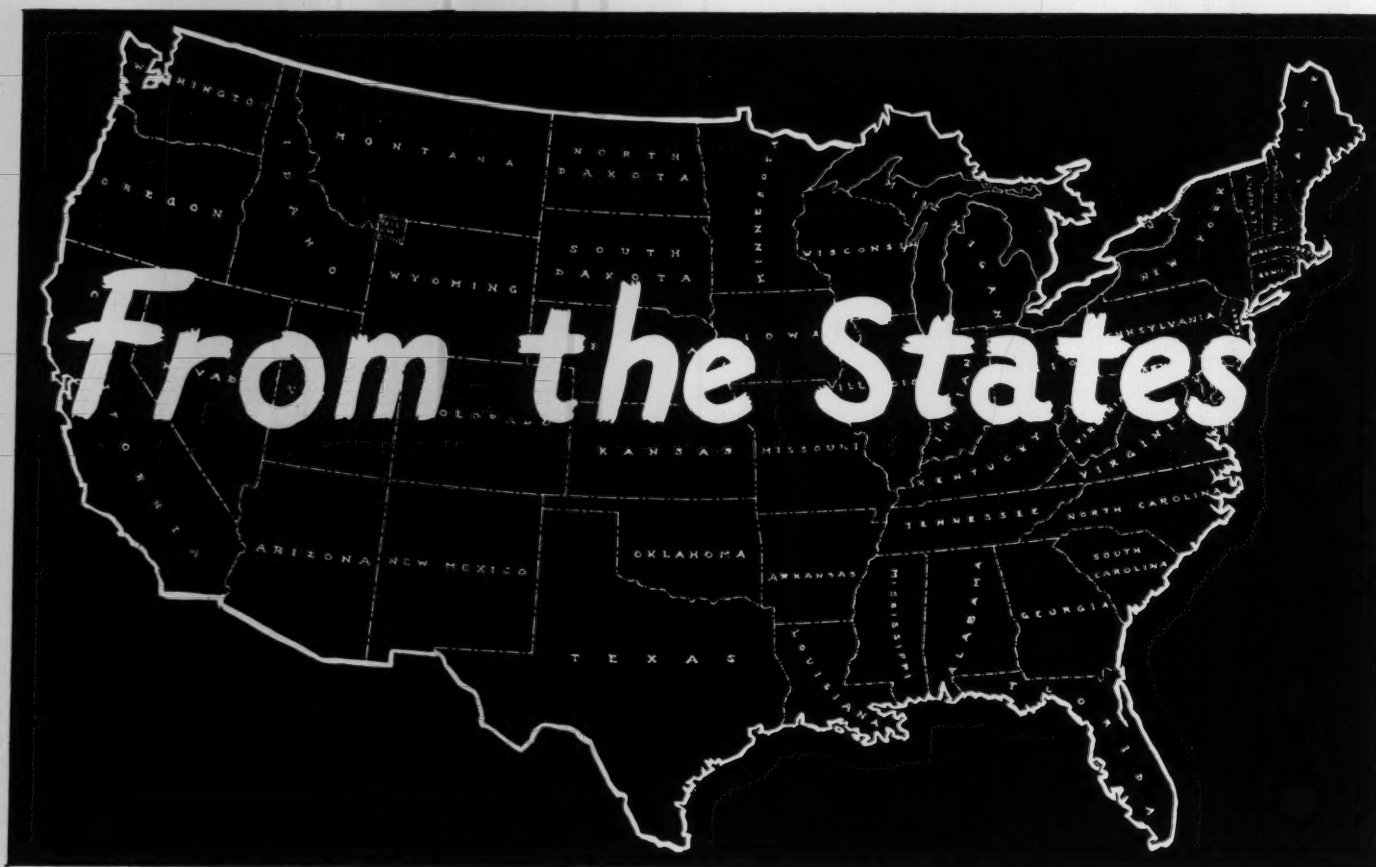
There are a number of good exercises and drills to develop the fingers and the wrists. The elements of fun, competition and practice may be combined by grouping three or four girls in a circle and having them pass the ball to one another continuously. The number of times the ball is batted into the air may be counted. If several groups are organized they may compete against each other.

The recovery of net balls may be practiced by twos. The first girl throws the ball into the net; the second girl beside her bends and recovers the ball, passing it to the thrower. The ball should be thrown into the net at different heights. The higher it hits the net the faster it will fall and the lower the girl must stoop to recover it.

The following drill is especially good to develop finger-wrist strength. Two girls face each other on opposite sides of the net about ten feet apart. They pass the ball at first about 12 feet high over the net, then 10 feet and finally, after moving close to the net, hit it so that it barely goes over the net.

In her article next month, the author will stress team play.





This department includes correspondence from state high school coaches, associations and state high school athletic associations. All associations are invited to participate.

National Federation Notes

THE new National Federation office was officially opened on September 1 at 7 South Dearborn Street, Chicago. Since many men have little conception of the function of the National Federation, it may be helpful to outline some of the activities of the organization.

The National Federation is made up of 37 member state high school athletic associations. The Federation national office is responsible for the publication of various books and bulletins dealing with playing rules and game administration. The number of such publications for a given year is considerably in excess of 100,000.

Through these publications the national office seeks to coordinate the work connected with the administering of playing rules and the engendering of good playing ethics. An illustration is in the hundreds of football meetings which have been held throughout the country during the latter part of August and the month of September. These meetings bring together coaches, athletic directors, athletic officials and school administrators in every member state.

Materials for these meetings are made up by the various state associations acting through the national office. The comprehensive system of training and testing athletic officials

is made possible through the aids which are furnished in this manner. A rules examination in the major sports is a part of the testing program. This examination is made up in the national office and used in most of the states.

The program goes further than the training of men in matters pertaining to the rules. A comprehensive co-operative plan to sponsor experimentation and scientific study of game administration is now in operation. Through this plan it has been possible to constantly improve game conditions and to adapt the games to a well-rounded school program.

Progressive men in each state are always contributing to progress along these lines. Contact between men in the various sections is maintained through checking questionnaires and bulletins which are widely distributed during each sport season.

Interscholastic contests which involve more than one state are played under provisions outlined by the National Federation. Contracts for such contests are made on national blanks. If more than two schools are involved, the meet or tournament must be sanctioned by the national office after approval is granted by the state association in each of the states from which teams are to be invited.

Records for each of the sports, particularly track and swimming, are compiled in the national office. Whenever an athletic performance is such as to warrant consideration for a national record, application is made on blanks supplied by the national office and the records committee in-

vestigates before accepting or rejecting the application.

At various times during the year sectional or national meetings are sponsored. The program is such as to enable an interchange of ideas relative to all matters which interest state high school athletic associations. The states are represented by the executive officers and board of control members. Membership on the executive committee of the National Federation is open only to board of control members. Each member state has one vote in legislative or administrative matters.

The present members of the executive committee are: president—E. R. Stevens, Independence, Kan.; vice-president—R. E. Rawlins, Pierre, S. D.; secretary-treasurer—H. V. Porter, Chicago; members—W. B. Spencer, New Haven, Conn., P. A. Jones, Sharon, Pa., H. R. Adams, Hyrum, Utah, B. C. Alwes, Donaldsonville, La., and J. E. Rohr, Nekoosa, Wis.

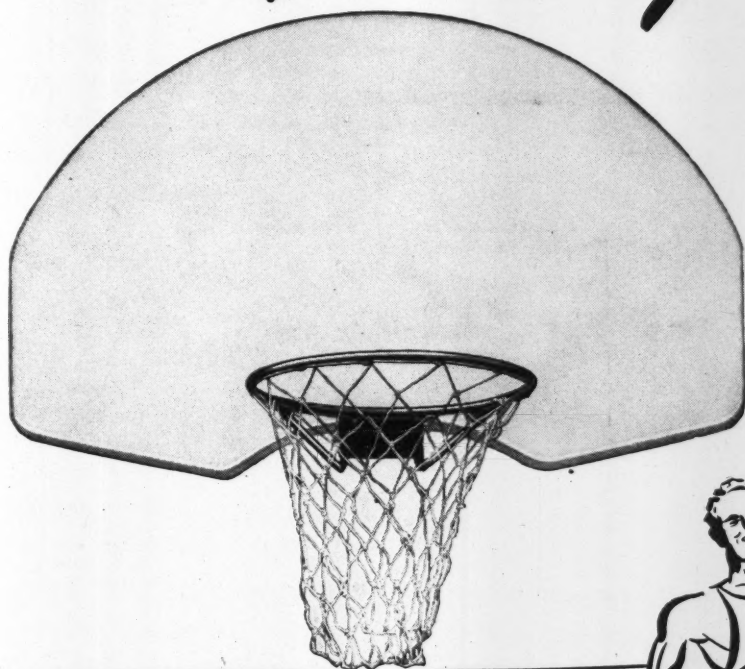
Post-season games hit

The sentiment in favor of a definite limitation for the beginning and ending of each of the major sport seasons continues to grow. Last year Illinois set a date for the ending of both the football and basketball seasons. Football ends on the first Saturday in December and basketball ends with the state final tournament. No all-star or post-season games are permitted.

During the past month Iowa has taken similar action. In fact they have gone a step further. They not only

(Continued on page 28)

THE NEW *Fan Shaped* BASKETBALL BANK

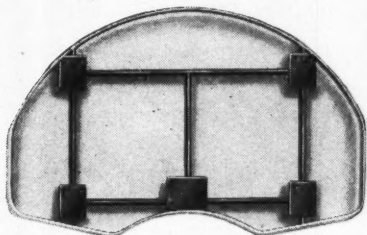


AS LEGALIZED BY THE
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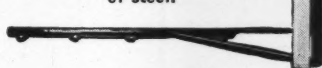


REAR VIEW showing the sturdy **SOLID STEEL** bracing and attachment plates.

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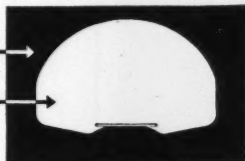
SIDE VIEW showing the smooth one-piece face formed from a single sheet of steel.



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A smaller target of different shape, the new bank will "muddle" many a team unfamiliar with it. It completely "junks" the game as played with the old rectangular banks.

TEAMS winning basketball laurels this season will be teams which have mastered the new "fan-shaped-bank" style of game. Teams without benefit of practice with the new equipment will be "blitz-krieged." The Porter-made Fan-Shaped Bank is exactly as the National Basketball Committee intended it. It possesses every official feature. But it costs less than the old bank cost, and we allow the freight on every one shipped. Write today and learn the amazing facts!

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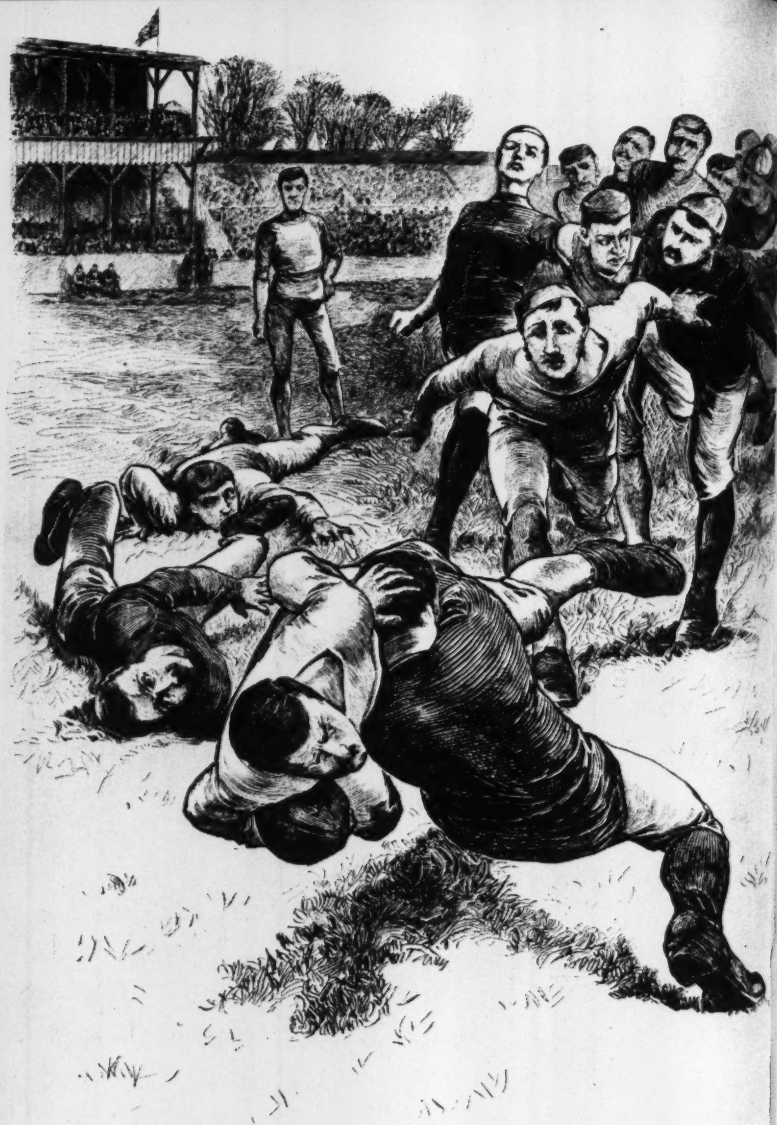
FOOTBALL

Thru the Years

SOME people make a hobby of collecting stamps. Others go in for butterfly wings. But Dean Hill all these years has made his hobby the collection of rare footballiana. Ever since he hung up his cleats at Georgia Tech, where he captained the team in 1910, he has been gathering every scrap of material on the game and its history he could find. In *Football Thru the Years* (New York: Gridiron Publishing Co. \$2.50), he dips generously into his storehouse to give the book world a fascinating picture-history of the sport. Through the illustrations and accompanying text, he traces the history of football from that day in 1823 William Webb Ellis "first took the ball and ran with it" to and after that tragicomic afternoon Roy Riegels lost his bearings in the Rose Bowl and ran the wrong way.



THE illustrations on this page show some of the wonderful old prints which Mr. Hill reproduces in his book. With the exception of the print at the above right, all these sketches were drawn by Frederic Remington, one of America's foremost artists, who played football

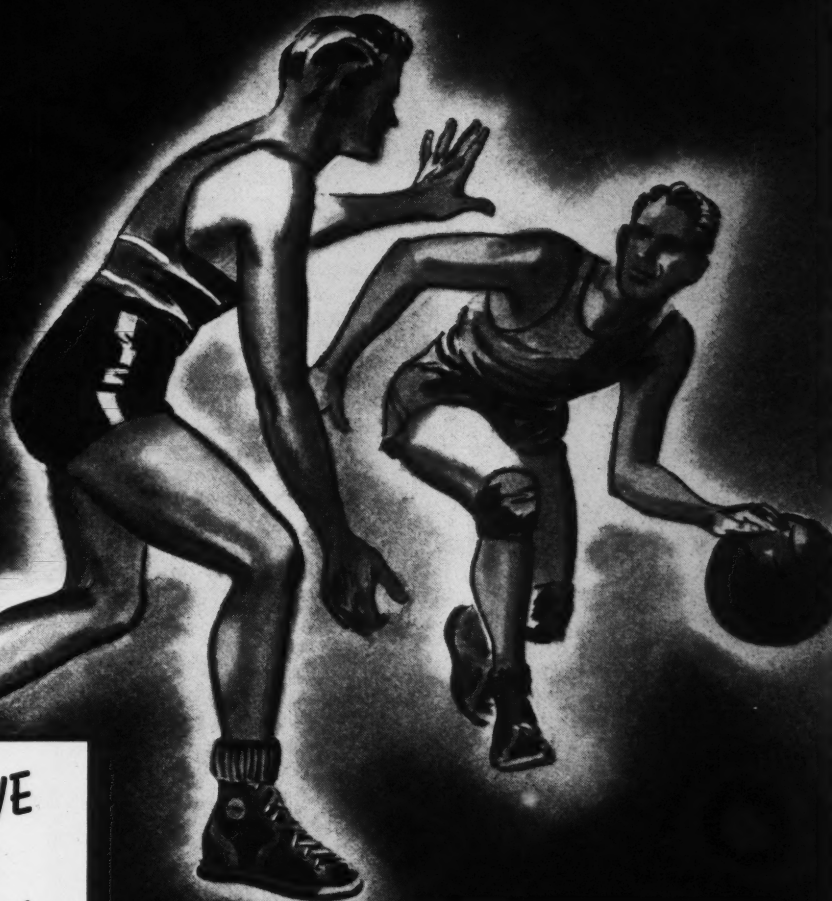


for Yale in the handlebar mustache days. Action photographs were unheard of in those days, and without Remington's gifted pen and brush, coupled with his knowledge of the game, pictorial records of early techniques and equipment would be sadly lacking. The story goes that Remington, the night before the 1879 Harvard-Yale game, dipped his jacket in a pool of blood at the slaughterhouse in New Haven.



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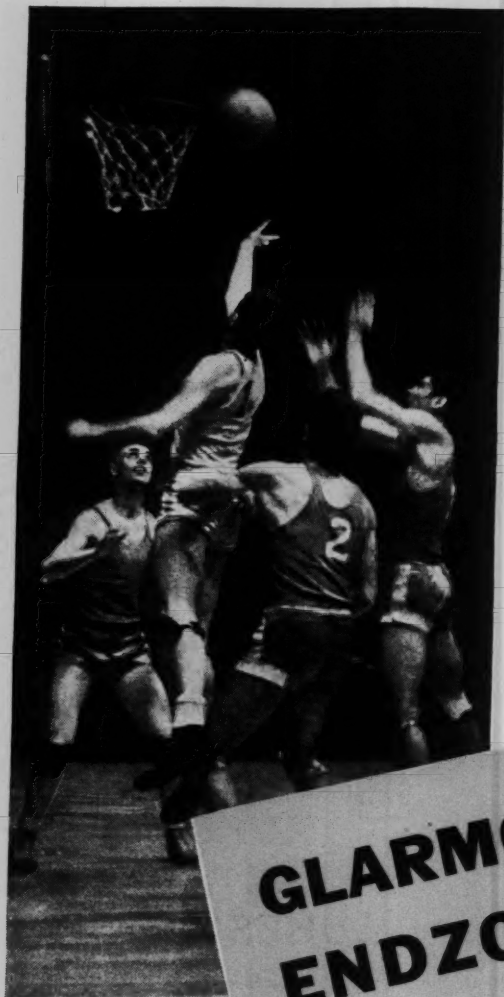


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From the States

(Continued from page 22)

prescribe limits to the football season but they also make it illegal for any school to participate in any way or to lend its support to the selection of all-star teams of high school players who might be brought together for a post-season or a pre-season game. Indiana has had a similar rule for a number of years.

These actions are in line with the policy of keeping each sport in its proper place in the school program. It is the feeling of the schoolmen that post-season and pre-season games are used more for exploitation than for any contribution to the welfare of players.

Great strides are being taken by most of the states in connection with meetings designed to improve game administration. These meetings follow a pattern which has been found effective by a few of the states which pioneered the work. At these meetings all of the various groups who are interested in a given sport are brought together so that there will be a clear understanding of the policies and practices of the state high school association. As a result, uniform methods are promoted and contests tend to become good will events rather than grudge battles.

H. V. PORTER,
Executive-Secretary,
Chicago, Ill.

Kentucky

Protective insurance

LAST year for the first time a protective insurance program was adopted and tried by this state. The cost was 75c per individual in football and 25c in all other sports. The fee also covered spring practice. Claims of \$886.25 were paid in football, which was slightly over the amount taken in in fees. Membership was optional with member schools. The move was a popular one and more schools this season should take advantage of the plan.

This year it is compulsory for schools to use registered officials. Any school violating this rule will be fined. All officials are to wear emblems furnished by the state association.

Other changes in the Association rules follow: (1) Principal shall verify player's age by referring to vital statistics, both for original certification and for certification of transfer athletes. (2) A new principal shall secure from the Association secretary a copy of the original classification of his players.

(3) This year the district winner and runner-up in basketball will meet at the site of the previous regional tournament to vote upon a new site and to make other arrangements. In the past all member schools in the regional had a vote on the location of

the tournament. By a two-thirds vote, the schools participating may adopt any plan they choose for the distribution of the tournament receipts. Should they fail to agree upon a plan, they will be compelled to use the state scheme.

(4) The traveling expenses of all first and second place track winners to the state finals will be provided for, starting next spring.

The Association has finished with all its ten football clinics. All officials were required to attend at least one of these to be eligible to work high school games in this state. The officials are all classified and the list published in the state bulletin which all member schools and officials receive. The rating is made on a basis of Excellent, Good, Fair, and Poor.

W. J. "BLUE" FOSTER,
Kentucky H. S. Coaches Assn.,
Newport, Ky.

Connecticut

Of age and eligibility

LATE in the spring, after the Conference had adopted a new code of eligibility following a two years' study, a movement to quash the new and revert to the old code was successfully engineered. The principal bone of contention in the new code was the "age" rule which placed the termination of participation in high school athletics at nineteen years, but with the proviso that a boy who reached nineteen during the season of any sport would be allowed to complete that season. The twenty-year rule has been the age limit heretofore, except for five-year boys who must conform to the nineteen-year limit. The old code terminates participation abruptly when age twenty is reached.

The vote in the spring postponed but did not actually kill the new code. However, the state is being polled as we write and the returns indicate that there is (thus far) a fifty-fifty division of opinion; this situation seems to point to a compromise rule at some future date.

Back of the move for a nineteen-year rule are several salient points: first, two of our neighbors, Massachusetts and New York, have such a rule, and schools on the Connecticut border naturally feel that our schools have a one year advantage over them; second, the trend appears to be toward a nineteen-year rule because the average age in high schools is decidedly younger than it was five or ten years ago. Many high schools haven't got a twenty-year pupil on their rolls.

Back of the twenty-year rule are tradition, the majority of states throughout the Union, and the very plausible argument that boys who are retarded, through no fault of their own in many instances, should not be barred from athletic participation which often is one of the principal bonds that holds them in high school—their last contact with education.

For many years Connecticut's

schoolmen and coaches have maintained a high standard in the administration of their high school athletes, and they can be trusted to solve this knotty problem for the best interests of all concerned.

The program of events for 1940—1941 does not differ from that of last year. It includes cross-country in early November; basketball, indoor track and swimming in March; track, golf, tennis and baseball in May and June. The Conference does not sponsor either hockey or football.

The Athletes Accident Benefit Fund, now in its fourth year, seems to be headed for a 50 percent increase in registration over 1939-40, which covered nearly 5,000 boys and girls, and paid every proper claim in full. The Fund is administered by a committee of the Council of New England Secondary School Principals Associations, with its office in New Haven. The schedule of benefits has been enlarged to include skull concussions, vertebrae fractures and sprains. The former schedule included practically every other type of bone fracture and tooth injury. All in all it offers at low cost one of the best coverages in the country.

WALTER B. SPENCER,
Conn. Intersch. Ath. Conf.,
New Haven, Conn.

New Jersey

Football booming

THE Skeeter State is enjoying a tremendous boom in football, both in the scholastic and the professional fields. The most recent promotion of the sport was a clinic in Newark under the sponsorship of Randolph D. Warden, the city's director of physical education. Coach Ronzoni of the professional Newark Bears led his team in a demonstration while three members of the local football officials association explained the latest rules and signs.

Following is a schedule of the coming coaches' clinics: Football, October 7 at Bloomfield High; Basketball, December 2 and 16; Track, February 17 at Newark A. C.; and Baseball, March 22 or 29 at Seton Hall College.

CHARLES J. SCHNEIDER,
New Jersey H. S. Coaches Assn.,
Newark, N. J.

Wisconsin

Fall clinic

THE annual state High School Coaches Association fall clinic will be held on the evening of November 7 at Shorewood High School in conjunction with the state teachers convention. The University of Kansas' famous basketball coach, Phog Allen, will lecture on his specialty and show moving pictures. Lou Birkett, coach of the Hammond Tech state high school champions of Indiana, will also lecture and show pictures as well as run his boys through a demonstration of his pet plays.

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state association of health and physical education will assemble for a luncheon and demonstration at the Elks Club. Included in the demonstration program are activities such as gymnastics, girls basketball, golf, archery, swimming, and the modern dance.

L. A. ERICKSON,
Wisconsin H. S. Coaches Assn.,
Shorewood, Wis.

The Athletic Accident Benefit Plan is entering its eleventh year. Registrations during September indicate that the total covered this year will exceed last year's record of more than 26,000 boys. The 1940-41 schedule of benefits also shows a marked advance in coverage, including a hospital benefit which is offered to the boys at an additional cost of only 25c per year.

The Plan is operating under two schedules. The "A" Plan offers a limited coverage to which the transportation and hospitalization benefits can be added at a total cost of \$1.10 per boy per year. Schedule "B," which is far more extensive, is available at a total cost of \$1.85 including transportation and hospitalization. If football is not included, then the total cost on Schedule "A" will be 60c per boy and under Schedule "B" 85c.

The Benefit Plan movement has developed to the point where 26 states are now operating similar plans.

P. F. NEVERMAN,
Wis. Interscholastic Ath. Assn.,
Marinette, Wis.

Illinois

Football rules quiz

AT PRESENT the state office of the High School Athletic Association is busy grading the football rules examinations which were given on October 7 to those officials seeking promotion. The grades on these papers are one of the stepping stones to higher ratings; the quiz must be taken by all who are ambitious.

Plans are also going forward for the annual meetings of the state football and basketball committees at Champaign on October 31. These groups assist in making recommendations to the national rules committees and consider problems which are of interest to the various state athletic programs.

Reports from the fourteen districts in which rules interpretation meetings were held, show that approximately 1,400 officials, coaches and principals attended these sessions. In some of the districts, rules meetings for players were conducted as well.

One of the outstanding features of the series was a joint meeting of Illinois and Iowa officials at Davenport, Iowa. In the afternoon preceding the festivities a radio broadcast was arranged over a local station with "1940 Football Rules Changes" as a topic.

In accordance with the change in name and composition of the state organization, the monthly bulletin will

henceforth be known as the *Illinois Interscholastic*, superseding the *Illinois High School Athlete*. It will carry news items on both athletic and general activities.

ALBERT WILLIS,
Illinois H. S. Assn.,
Chicago, Ill.

Idaho

Over 12,000 strong

MORE than one out of every three high school students last year was an athlete, a tabulation of student participation in athletics shows. Of a total high school enrollment of approximately 33,000, exactly 12,105 participated in the various sports with basketball, football, track, and baseball ranking in that order.

The breakdown by sports follow: basketball, 4,003; football (11-man), 3,197, (6-man), 839; track, 1,537; baseball, 1,026; boxing, 696; tennis, 385; softball, 263; golf, 106; wrestling, 93; and volleyball, 60.

The Athletic Accident Benefit Plan adopted last year fulfilled all expectations. A total of 4,100 students were enrolled with half the enrollment in football. Total receipts amounted to \$2,681 with \$2,150 being paid out for injury claims: \$1,650 in football and \$500 in the other sports.

Two hundred eighteen claims were paid: 63 for broken bones, 13 for dislocations, 49 unclassified, 27 dental, 13 sprains, 6 cuts, 52 X-rays, and 3 concussions. Enrollment at present indicates that more schools will avail themselves of the service this year.

All but 30 member schools of the Association are now playing some form of football: 85 schools are playing the 11-man game and 50 the 6-man game.

E. F. GRIDER,
Idaho H. S. Athletic Assn.,
Boise, Ida.

Rhode Island

System moderne

THE decade from 1930 to 1940 has brought about so great a change in high school athletics in this state that many of the men who have been connected with coaching and administration over this period find it difficult to realize how little they had once and how much they have now. Step by step high school principals, athletic directors, coaches, officials, colleges, and newspapers have collaborated in developing a program of schoolboy sports of which the state is justly proud.

All the state high schools are now organized in an Interscholastic League which classifies them according to male enrollment into three divisions (A, B and C). The member schools are under direct supervision of the state Secondary Schools Principals' Athletic Committee. This group has set up a strict code of eligibility rules, and has appointed John B. Martin of the *Providence Journal's* sports de-

partment to serve as schoolboy sports commissioner.

Mr. Martin draws up the league schedules, assigns officials and performs many other tasks of a like nature, all under the supervision of the Committee. In addition the Committee keeps a paid secretary whose duty it is to secure and file all records pertaining to student participation, including eligibility lists, student transfers, reports of officials and coaches, and related materials.

Specially designed championship plaques are awarded to all three classes in football, baseball and basketball. In A and B competition only, championship plaques are given in outdoor and indoor track, relay carnivals, cross-country, tennis, hockey and golf. Schedules provide for playoffs to determine state champions in baseball and basketball, in which the various class champions may play each other.

Set medals are awarded in outdoor and indoor track championships as well as in cross-country. Special medals are awarded to those breaking established records in these sports.

Strides are now being taken to set up insurance coverage for the athletes. Already many of the schools in the state have at least partial coverage for competitors. Practically every school requires a medical examination of all boys competing in strenuous sports, while medical attention is required to be available at all games.

W. HAROLD O'CONNOR,
Rhode Island Intersch. League,
Harrisville, R. I.

Washington

Spring football goes

SPRING football practice was banned by the state Athletic Association at the annual fall meeting. Schools violating the new rule will be suspended from the Association for one year.

The eligibility rule which requires students to be in school the previous semester in order to be eligible for athletic participation was modified out of consideration for boys returning to school after being called for a year of military service in national guard or naval reserve units. Under the new provision these students will be eligible again one year after dropping out of school, provided they are not over the 19-year age limit.

Two proposals were presented calling for changes in the state basketball tournament. A plan to establish separate Class A and B tournaments was first passed, then reconsidered and finally tabled pending a survey. All Western districts favored the two-tourney idea but the Eastern districts, uncertain of how the proposal would affect their regions, voted for a delay.

Committees were appointed to investigate the sponsorship of statewide tournaments in boxing and skiing.

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Puyallup, Wash.

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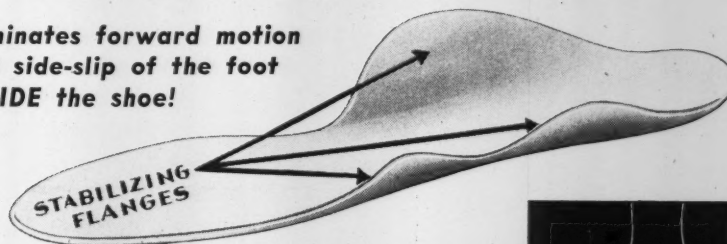
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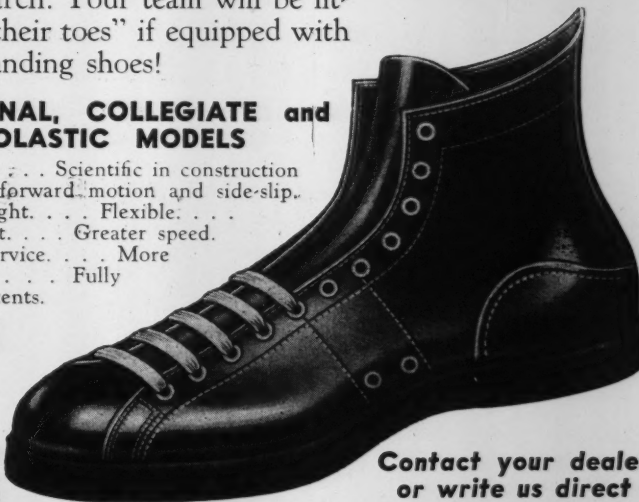


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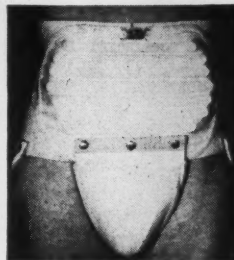
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The Scoring Kicks

(Continued from page 17)

The ball should be held and dropped directly in front of the kicking foot. It is held between the hands at approximately a 90-degree angle, with the fingers spread slightly along the sides and the thumbs placed on the sides at the top.

Both hands are in identical positions and should be removed together so that the ball will drop straight and land squarely on the tip. As the ball lands, it should not lean to the right or to the left of the kicker but should be straight and slightly tilted back.

As a boy perfects his kicking, he will save precious moments by learning to adjust the ball in his hands as he is taking his first kicking step. He should spend some time on learning to drop the ball accurately as this is essential.

The ball is released at a point parallel to the left knee. For a longer kick, it should be released at a slightly higher point and should be tilted at a greater angle to effect a kick of lower but longer trajectory. A longer half-step is taken with the kicking foot and a little longer step also taken with the balance foot. These steps should be commensurate with the laws of good balance. The ball is dropped further ahead to get more follow through and power in back of it.

Lining and timing

In the drop kick, as in the place kick, a line may be drawn from the spot of prospective contact to the point from which the kicker will start. The kicker must again make sure that this line points directly at the target beyond the crossbar.

The timing is the hardest part of the drop kick. Most beginners are inclined to be too fast in their timing and contact the ball almost before it touches the ground.

There is only one method of acquiring timing and that is by practicing very short kicks in slow motion at a target, usually another boy six or seven yards away. The kicker should try to kick into the other boy's hands. The kicker should take very slow steps and swing his leg in slow motion. Counting out loud slowly as he takes each step will also help improve his timing.

The ball should never be smashed. As in all kicking, it should be an even, sustained sweep.

In both place and drop kicking, as the ball is about to be contacted, the upper part of the body should

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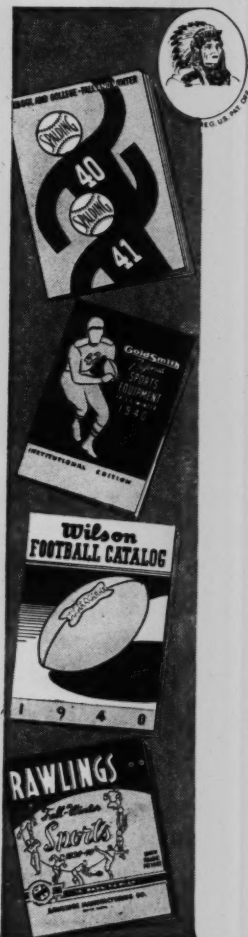
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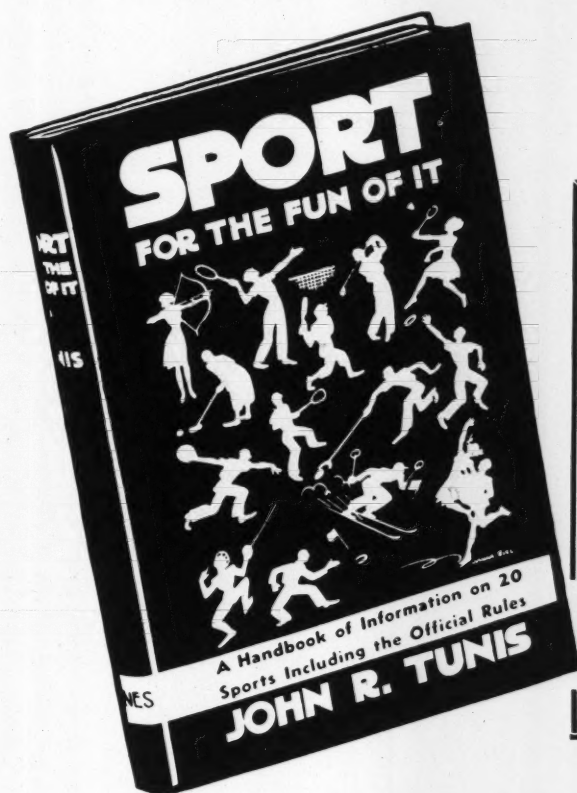
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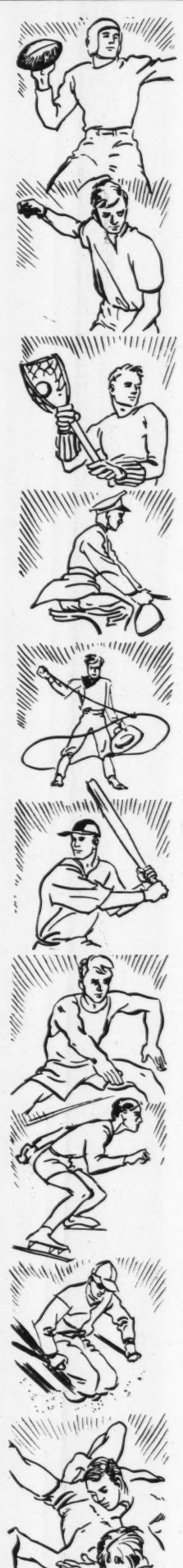
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be drawn back, even though the kicker is going forward at the same time. This aids in getting drive behind the kick. If he leans over the ball as he kicks it, he cannot get the height or the distance.

The following things should be kept in mind:

1. Do not do too much kicking on the day before a game.
2. Do not wear shoes that are too heavy, too pointed or have too long cleats.
3. Never try a kick if groggy or if kicking foot is injured.
4. Remove mud from cleats of kicking shoe before attempt.
5. On a muddy field, the place kick is superior to the drop kick.
6. Good eyesight is indispensable.
7. Work under pressure on practice days.
8. Seven and a half to eight and a half yards back from center is just right for safety's sake.
9. Practice kicking goals at difficult angles. This develops accuracy and makes kicking comparatively simple when you move out directly in front of the posts.

Lights for Six-Man

(Continued from page 18)

culits is this: during practice or before game time, only one of them need be used for infield practice or for the convenience of arriving patrons. This will cut the amount of kilowatt hours used and lower the light bill.

The poles are made of water oak and are 54 feet high. They are set in the ground, after being creosoted, to a depth of eight feet. If funds are available, the use of pine poles is recommended. Pine does not split as easily as oak and it is easier to attach insulators, crossarms and brackets to them to facilitate the transfer of the aforementioned units for softball.

Where pine is used, four additional brackets may be purchased to fit the reflectors, one to each of poles I, J, K and L. The transfers can then be made in less than a half hour.

Poles H, I, J and K may be used for backstop purposes by drawing wire between them, making a stop approximately fifteen feet from home plate. Another good feature of the softball diamond is that almost all of it lies in the six-man field's end zone. This saves considerable wear and tear on the gridiron and dispenses with the necessity of removing large quantities of sod to make room for softball.

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WESTPORT, CONNECTICUT

HIGH SCHOOL CROSS-COUNTRY RUNNING

By Bowman Hall

The Finnish style of distance running represents the optimum in efficiency

As a middle-distance runner at Michigan Normal College in March, 1938, Bowman Hall submitted one of the most complete pieces on middle-distance running ever published in "Scholastic Coach." He has since received an M.S. degree in physical education from Indiana University and done graduate study work in physiology at the University of Michigan and Springfield College. At present, he assists in coaching distance running and cross-country at the Emmerich Manual Training High School in Indianapolis, Ind. Using the system of training that follows, the Manual cross-country team was undefeated last season and won the unofficial state championship.

NOT so long ago, the strenuous sport of cross-country running was viewed with jaundiced eyes by many persons concerned with the welfare of high school students. It was generally felt that the sport predisposed to heart trouble and, in particular, that it developed an "athletic heart."

Recent investigations have proven that there is no such thing as the "athletic heart"; it does not exist and never did. We must remember, however, that while it is practically impossible to harm the normal healthy heart by exercise, no matter how strenuous, such exercise may be highly injurious to an individual suffering from rheumatic infection or organic heart disease. For this reason it is of the utmost importance that every candidate should receive a thorough medical examination.*

From a physiological standpoint, the paramount consideration in teaching cross-country to high school boys is to develop each boy to a point where he can run two miles as rapidly and economically as his natural organic capacities permit.

A. V. Hill, the famous British physiologist, asserts that the ability to run fast for a prolonged period is dependent upon two factors: the rate of the individual's oxygen intake and the magnitude of the oxygen debt he can incur. These factors are closely related to fatigue.

Fatigue has been defined as "a state in which there is a lack of balance between intake and output of biologic energy." In general, two types of fatigue are recognized: nervous fatigue and muscular fatigue. The former is associated with the central nervous system and the lat-



CLIMBING HILLS is the toughest part of cross-country running. By leaning well forward, greater propelling force may be exerted behind the center of gravity.

ter with the peripheral muscle; but both forms are closely interrelated.

Nervous fatigue, according to recent experimental evidence, is believed to have its seat in the synapses since these are the most easily fatigued structures in the neuromuscular mechanism. Factors contributing to the onset of nervous fatigue include monotony, responsibility, mental anxiety, and the complexity of the movement performed.

We all know how these factors may influence success in athletics. Some men have found that an almost normal capacity for work may exist in spite of a marked degree of subjective fatigue. The subjective feeling of fatigue, therefore, is a fallacious index of capacity for work. There is no necessary correspondence between this type of fatigue and the ability of the muscles to perform.

Muscular fatigue arises as a result of two different causes. It may result from a short period of violent exercise in which the accumulation of lactic acid is responsible for a decreased working capacity. Or it may be produced as a result of a prolonged but less severe activity due to a gradual depletion of the glycogen reserves of the body.

As already stated, the primary concern of the instructor is to build up in each boy a mechanism which will withstand the onset of fatigue. The circulatory system plays a ma-

jor role in this process. The primary function of this system is to maintain a constant internal environment in the body. It is through adaptive changes in the circulatory system that the defense against fatigue is built. The greater the alkaline reserve of the individual's blood and tissues, the higher the peak he is able to reach; and, when the peak load has been exceeded, the longer he can continue before exhaustion supervenes.

That various chemical substances delay the onset of fatigue is well known. The value of sugar as a partial restorer of working power has apparently been demonstrated. Baking soda, too, may prove beneficial for ordinary daily fatigue. During the first World War, it was found that oral administration of sublethal doses of sodium biphosphate promoted muscular activity and prevented fatigue.

Perspiration is another factor closely allied to fatigue. Excessive, prolonged sweating during exercise has a number of deleterious effects. It causes dehydration of the tissues, gastric hypo-acidity, acidosis, fatigue, exhaustion, and muscular and gastro-intestinal cramps.

An amount of minerals is sweated out that cannot be replaced by the chlorides normally present in food and drink. Salinized drinking water of a concentration of approximately one percent sodium chloride

*Copies of a medical examination blank will be furnished by the writer upon receipt of a stamped envelope.

will go far in preventing and controlling this type of fatigue. At best, however, sugar and alkali are only partly efficacious.

The most effective method of increasing the individual's ability to withstand fatigue toxins is through exercise. As a result of training, less lactic acid is formed by muscular contraction and there is a better oxidative removal of the acid formed. It has been noted that training will increase the alkaline reserve as much as ten and seven-tenths percent. As a result of these changes, exercise proceeds with less distress and less fatigue.

The exercise program of the cross-country runner should be based on the physical and mental condition of the boy. Inasmuch as it requires a minimum of six to nine weeks' practice for the individual to develop his organic power to the point where he is capable of making a maximum effort, the preliminary training program should be cautiously and carefully planned.

At best, practice schedules are only tentative and general in nature. Allowances must be made for the condition and background of each boy. Looking at the season in perspective, it is neither wise nor desirable to hold the better-developed boys in check nor to force the less well-developed boys beyond their capacity.

Practice program

The suggestions that follow are general in nature, and must be adapted to each individual's needs and capacities. Under no circumstances should a boy endeavor to run two miles the first week of practice. A better plan is to run a quarter of a mile at cross-country pace, then walk a quarter or an eighth of a mile. This procedure should be repeated as many times as the condition of each boy permits until he eventually runs a distance about one and a half times as far as the first race of the season. Upon acquiring the necessary confidence in himself, he may then undertake the full distance without stopping.

From this point on, the practice program should be arranged with the aim of developing the boys' ability to hold a constant pace during the middle of the race. For most schoolboys, this means about a five to a five-fifteen mile.

The basic procedure for developing endurance is to run from three-fourths to one and a half times the distance for which the boy is preparing, at three-fourths to top speed. Speed is obtained by running time trials over distances up to and

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including three-fourths of the racing distances. These procedures should be combined according to the developmental needs of each boy.

It must be borne in mind that a lot of over-distance jogging does not develop an appreciable amount of endurance. The runner must realize that when he is jogging he is not running at a cross-country pace. It is better to go one and a half to two miles at a brisk pace, walk a short distance and continue on at a similar pace, than to jog three miles.

In the following table are shown the approximate times it should take a runner to negotiate various distances based on his performance at two miles. For example, a runner capable of 10:20 minutes for two miles, should be able to do approximately 2:11, 3:30, 4:49, 7:38 and 15:57 for one-half, three-fourths, one, one and a half, and three miles, respectively.

1/2 M.	3/4 M.	1 M.	1 1/2 M.	2 M.	3 M.
2:05	3:21	4:37	7:20	9:56	15:21
2:07	3:24	4:41	7:26	10:04	15:33
2:09	3:27	4:45	7:32	10:12	15:45
2:11	3:30	4:49	7:38	10:20	15:57
2:13	3:33	4:53	7:44	10:28	16:09
2:15	3:36	4:57	7:50	10:36	16:21
2:17	3:39	5:01	7:56	10:44	16:33
2:19	3:42	5:05	8:02	10:52	16:45

Supplementing the daily running program should be a period spent on the development of the upper part of the body. Even though only a relatively few sets of muscles are used in running, so much lactic acid is accumulated that the blood carries it to other parts of the body and makes other muscles tired.

When the lactic acid, however, goes to lodge in other muscles more oxygen becomes available to neutralize it. In other words, our arms and shoulders may actually help us recover from a tired-leg condition. The more the entire body is strengthened in the beginning the faster the individual will be able to run later on. The old familiar exercises of chinning, sit-ups, leg raising while lying on the back, push-ups, and dipping are ideal.

The technique of middle-distance running and the form used in cross-country running differ considerably. Through observation and experience, the writer is convinced that for distances of one mile and over the Finnish style of distance running represents the optimum in efficiency. The relatively erect body carriage, the swinging hip motion, the easy forward movement of the bent knee, the heel and ball rocking movement of the foot in landing, and the high relaxed arm swing in which the elbows are kept away from the body represent a style of running which is truly effective and economical.

Recent investigation in the laboratories of Oberlin College have shown that the habit of running with all four limbs and of replacing tense, awkward ballast-shifting movements of the arms with the high speed ballistic movement of the swinging arms is a sign of the trained runner.

The ability to withstand fatigue, they found, is the result of loose, ballistic running movements and of a posture arising from well directed reciprocal movements of arms and legs. Evidence from the same source indicates the economy of having distance runners alight on the heel with the foot relaxed and leaving the foot flat on the ground as the body passes over it. With this technique, use of a shoe with a rubber heel is imperative.

The cross-country runner is confronted with the problem of climbing and descending hills. Since it requires seventeen times as much energy to raise the body ten feet vertically as it does to propel it an equal distance horizontally, it is essential that the runner lean well forward when climbing a hill. He is thus able to exert a greater propelling force behind the center of gravity and thereby obtain the most work for the energy expended.

Running downhill

In descending a hill it is most economical to relax completely and make no attempt to resist the increase in momentum. When encountering rough country such as sand or plowed ground, the stride should be considerably shortened.

Inexperienced runners invariably start a race too fast and then slow down too much later on. One of the benefits of a proper and sufficiently long training period is that it develops greater ability to gauge speed and reserve strength, and produces a greater immunity to the exciting effect of competition.

An unusually large amount of literature concerning the diet of the athlete is available to anyone interested in this phase of the conditioning program. In planning a diet for the cross-country runner, it must be remembered that meats and cereals have a high acid ash and unless accompanied by a sufficient amount of fruits and vegetables to supply the alkali, diets rich in meat and cereal would tend to diminish the alkaline reserve of the body and thus sooner or later affect the power of the muscles to dispose promptly of the lactic acid. There is evidence that the addition of gelatin to the diet tends to increase muscular endurance.

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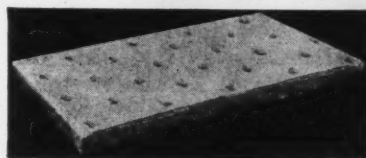
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NEW BASKETBALL BACKBOARD

By H. V. Porter

Secretary, National Basketball Committee

BASKETBALL fans this winter will find that some of the equipment has taken on a streamlined appearance. Most new gymnasiums and many of the old ones are being equipped with the new fan-shaped backboard which was authorized last spring by the National Basketball Committee. The new board is considerably smaller than the old one and does not have its sharp corners and edges. There is very little board surface below the level of the basket ring, and the top is an arc instead of a straight line.

Equipment manufacturers have made a contribution to the game by bending their efforts toward the construction of such boards at reasonable cost. One of the factors which influenced the National Committee was the matter of economy in construction. The first steel backboards of the traditional rectangular design presented many problems. Some of these boards cost as much as one hundred dollars or more per pair.

Several excellent steel boards are now being turned out by mammoth stamping machines at a cost considerably less than half this amount. Reliable manufacturers are producing the steel boards for forty dollars or less per pair.

Goals to fit the new boards have been constructed in such a way that there is a minimum obstruction of view and of interference with activities behind the plane of the backboard.

Evolution of equipment

From the very beginning, backboards have been rectangular in shape, six feet wide and four feet high, with the basket attached one foot above the lower edge of the board. During the early years this shape and size were desirable. The space below the level of the basket was necessary as the old style basket braces were fastened to the board about one foot below the basket.

In recent years developments in gymnasium equipment construction have rendered these cumbersome braces unnecessary. Consequently the chief use for most of the space on the backboard below the level of the basket has disappeared.

Another reason for the space at

the bottom of the board was the size of the ball. The old ball was considerably larger than the neoteric one, having a maximum circumference of 32 inches. Because of the difficulties in construction that existed at the time, most balls stretched to the maximum size soon after being put in play.

In recent years the size of the ball has been reduced to a minimum of 29½ inches and a maximum of 30 inches. Improved methods of construction has resulted in a ball which can be made any given size and which will not stretch with usage. The balls also have a slightly faster reaction time, due to the elimination of all sewed seams and the dead spots which were inherent in balls made by sewing panels of leather and cloth together.

This change in ball is related to the new type backboard. A slightly different technique must be used in bank shots; a technique which makes the lower part of the board just so much waste space.

Many changes have taken place in the past fifty years. More care is given to the accurate construction of playing equipment. Inexpensive boards made of steel, plywood, bakelite or other synthetic materials have been developed. An improved type of basket without projecting rods has been perfected and engineers have designed flanges which make attachment of baskets to the backboard a simple matter.

Changes in the location of the backboard with reference to the end wall and the end line, and the development of new skills in shooting goals from behind the plane of the backboard have made the waste space on the large board a detriment. It also interferes considerably with the vision of spectators who are compelled to sit in parts of the building which are not between the planes of the two backboards.

Basketball courts have a maximum of 86 feet for seats on the sidelines between the planes of the baskets. No other major game has this visibility handicap. Anything that can be done to alleviate the situation is worthwhile.

The transition to the smaller backboard may be gradual. As far as expense is concerned, there should be little waste in making the change.



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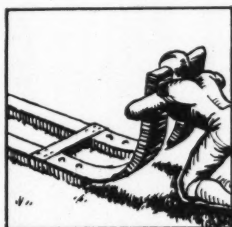
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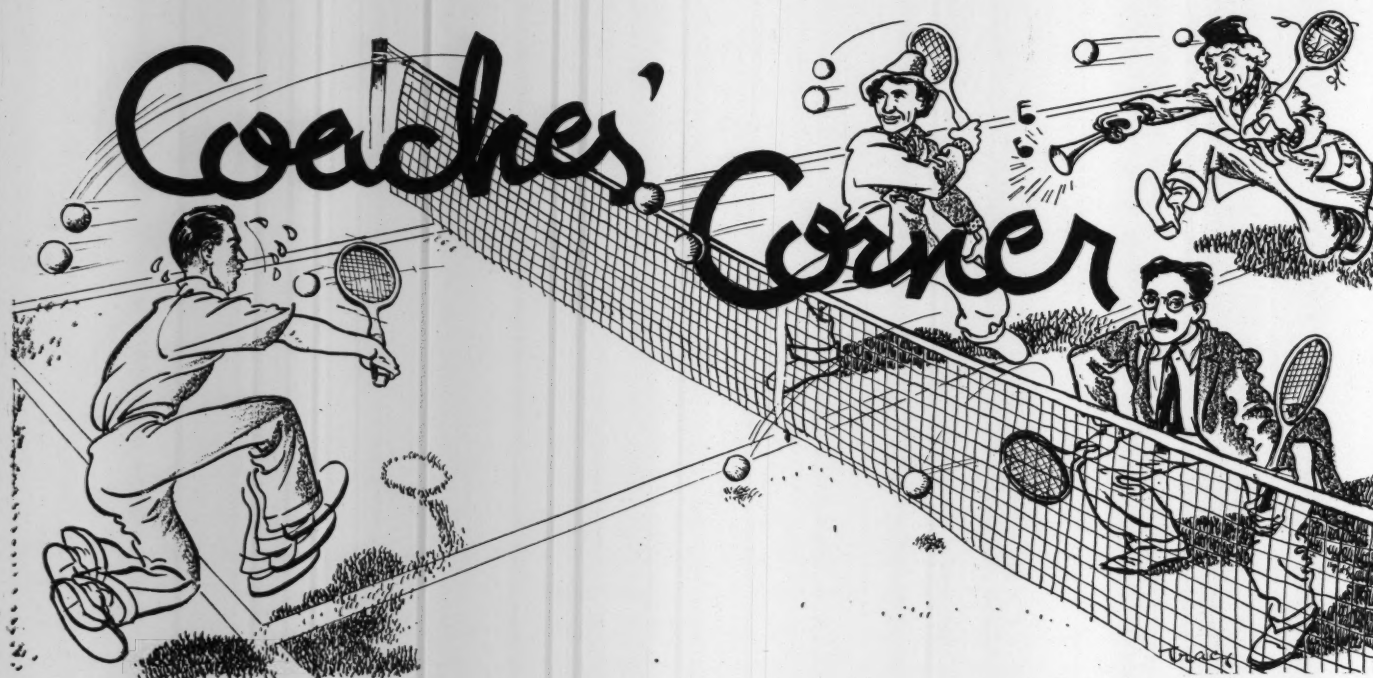
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If you have something for this column send it to Bill Wood, Evanston Township High School, Evanston, Illinois.

While catching up on the tennis news the other day, a headline jumped up and almost floored us, to wit, "Marx routs Van Horn, 6-1, 6-0." Since the match had been played in Los Angeles (Pacific Southwest tournament), close to the movie colony, we immediately thought that at least one of the versatile Marx Brothers must have had something to do with it. We visioned something like above. Upon reading further we discovered that, while the Marx in question was neither Groucho, Harpo nor Chico, he did have roots in the family tree. It was Art (o), son of Groucho.

We welcome to *Coaches' Corner* Coach Wavel Gibson of Elk City, Kan. "A green freshman checked out equipment for football. After the first practice I noticed when he took off his suit that he had on a pair of B.V.D.'s under his football garb. When I inquired 'How come?' he answered, 'Why not? The other guys wear shorts.' He had reference to their athletic supporters."

Bert McGrane of the Des Moines Register, that features one of the best sports sheets in the country, tells about a couple of high school teams with outstanding records.

"The coach of a team in the West heard about an unbeaten team in Ohio, so he inquired about a post-season game. 'We haven't lost a game in three seasons, and we understand you haven't been beaten in three or four years,' wrote the Westerner. 'How about a game after Thanksgiving?' The coach from Ohio read the letter and snorted disgustedly, 'Go get yourself a reputation. We haven't had to punt in the last five years.'"

One of the most popular members of the post-season banquet circuit is Jimmy Conzelman, new headman at the Chicago Cardinals' camp. Once in order to point out that the values of football fade rapidly after graduation, he remarked: "All I can show for my twenty post-graduate years is a little house with a big mortgage, six white shirts and a toaster." He prided himself, however, on his ability as a character-builder. His particular pride was a certain team composed of players remarkable for their high moral qualities. While praising them at a testimonial dinner an alumnus thought to enliven things a bit by relating a few episodes featuring escapades of Conzelman's own college career. Inspired by what he had just heard, the next speaker remarked, "Damned if I don't believe that it takes a guy that never had any character to teach it."

Conzelman, for many years football coach at St. Louis University, has this to tell of his first year there. "Against Missouri we received the ball and executed a modified rumba formation. The purpose of the shift was to keep the minds of the alumni off what happened when the ball was passed.

"Missouri was off-side three times in a row, drawing a total penalty of fifteen yards. One of the boys glanced at the bench and yelled: 'Coach, we've got 'em on the run!' The next time they weren't off-side and we lost the fifteen yards. . . . The rest of the game was played between our one and four yard lines." Thanks to William Conway.

The Evanston junior-varsity was just coming off the field after a season's opener with Lake Forest. A late-comer asked Halfback John Shoemaker about the score.

"Fine game," Shoemaker panted. "We won. . . . Nothing to nothing. . . . Moral victory!"

Best of the many wisecracks growing out of the attempt by the Cleveland Indians to oust their manager, Oscar Vitt, is that reported by Arch Ward in "The Wake of the News."

"When Hal Trosky came to bat in Comiskey Park last week, Jimmy Dykes greeted him with, 'Ah, Comrade, how goes the revolution?' Trosky replied, 'You've got me wrong. I'm a member of the ruling class. I'm captain of this club now.'"

The rain had begun on Monday and all week long had been turning the Cameron College gridiron into gumbo thick and deep. And Coach Jess Thompson had just emptied the till for the purchase of new black silk suits!

What could the boys wear on Saturday? A fire sale saved the day. The coach bought long underwear and white cotton jerseys for the whole team. The fans gasped while the Cameron "Ghosts" ran roughshod over Eastern Oklahoma College, 20-0.

By the way, the first Pan-American Games will be held in 1942, according to a report from the Pan-American Sports Congress. The games will be held every four years.

We learn also that Germany and Italy are quite willing to have the best of their boxers included on the All-European team that will compete in the International Golden Gloves contests in Chicago next year. It's all right, boys. Come right ahead. Bring Adolf and Benito with you.

Somehow or other medals and trophies always have a way of arriving too late for the day of presentation. Prize victim is Edgar J. Maskery who won a 220-yard dash at Paterson, N. J., in 1900, but didn't receive his medal until a few weeks ago. It had been sent to an engraver for inscription and forgotten.

We take time out here to salute Joe Muchmore, popular sophomore baseball coach and teller of tall tales at Evanston, Ill. Rocky Hampton relates that while Joe was playing for Charleston, Ill., he once claimed to have scored a touchdown on the ten-yard line. When the referee wouldn't allow the "score," Joe is said to have put up quite an argument. His distrust of all officials dates from then.

Incidentals. Oak Park, Ill., has won its last 34 football games against about as tough high school competition as there is in the country. Evanston has never lost a game to a member of the Chicago Public Schools League. But Evanston has been unable to defeat Oak Park in the past four years.

Certainly one of the best and by far the most colorful player in this year's Green Bay Packers-College All-Star game was "First National" Banks McFadden of Clemson College.

When asked about his home town, Great Falls, he drew attention to its lack of size with the comment, "Whah, thah's no such place. It's kind of a crossin'." It was at Great Falls, however, that Banks under the tutelage of his half-brother, Coach T. D. Wallace, became the greatest kicker and passer in the state. There is a legend about the time officials stopped a game in order to measure one of his kicks. Against Winnsboro he booted one from mid-field that cleared the end zone, the fence, and finally landed in some bushes across the street.

Favorite yarn department. Jack Slocum, the astute sports statistician of the air waves, recalled a long drawn out ball game in St. Louis with the Yankees annihilating the Browns and the press box yawning in the light of the closing day. Across the field the sun was sinking low. Suddenly one bored baseball writer came out of his coma, stared at the setting sun a moment and, in a surprised tone, asked, "Say, is that the west out there?"

Whereupon another scribe replied, "Well, I don't know. But if it isn't you had better start writing because you've got the greatest story in the history of our profession!"

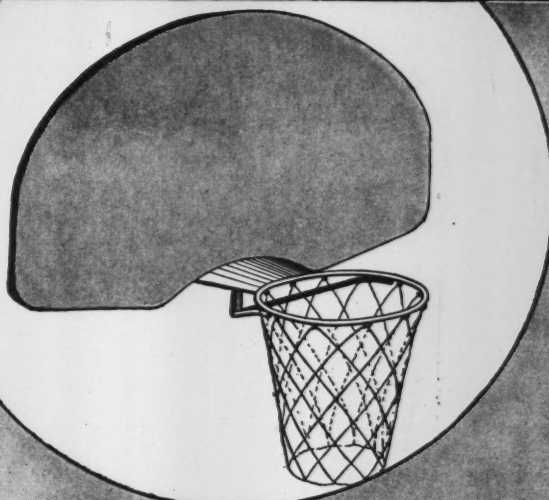
The business of swinging through tree tops and howling like a banshee must be going on the rocks. For Glenn Morris, 1936 Olympic decathlon champion and once a film Tarzan, recently quit the movies to play football with the Detroit Lions. Two years ago he declined a Lion bid.

The one and only "Hamp" Potts is now enrolled at Chillicothe Business College after playing barefooted through four years of high school football at Ackerman, Miss. He still insists on playing without shoes. "Hamp" just can't see the percentage in dragging around big heavy shoes when he is trying to outrun somebody.

BILL WOOD

MEDART HIT PARADE

1

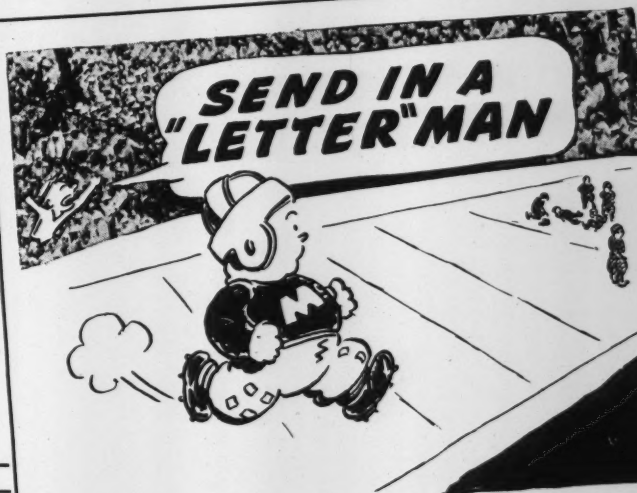


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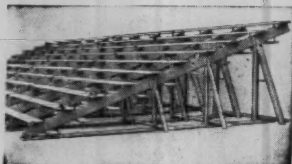
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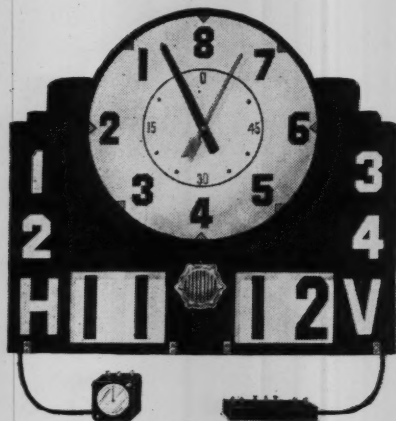
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Coaching School Notes

(Continued from page 9)

yardage the opponents have to make. The distances are classified under the headings: long, average and short. There is a defense for every specified zone under given conditions.

A few sample situations are illustrated in the following table, with the proper defense listed in order of preference.

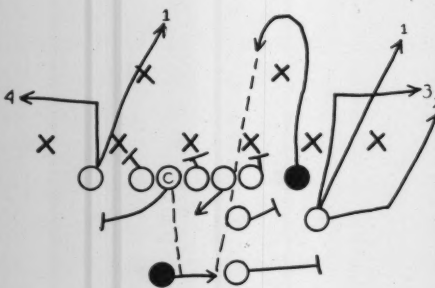
Yd. Line	Class.	Meaning	Defense to use
Goal to the 10	Long Average Short	2nd-10 3rd-4 2nd-4	1-4-7 1-4-2 1
20 to the 30	Long Average Short	3rd-7 1st-10 3rd-2	3-2-5 3-4 3-6

Bill Alexander

Reported by H. L. Masin
New York, N. Y.

COACH BILL ALEXANDER of Georgia Tech is a master of deception whose trademark in the world of punts and passes is an attack which is a "delusion, a mockery and a snare."

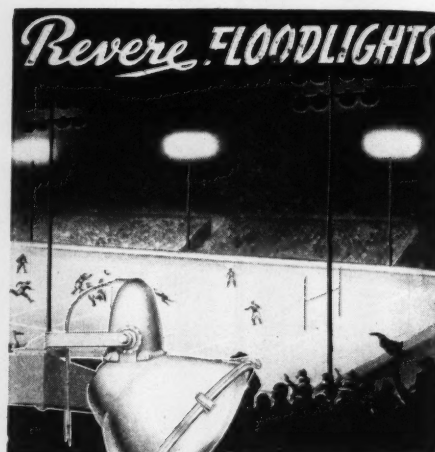
In his course at the *New York Herald Tribune* Coaching School, the graying veteran, who has been coaching at Tech for 28 years, expounded the plays and methods he has found most effective in recent years.



Diag. 1

Alexander blasted several popular concepts. Although he keeps his men in the same relative positions in right or left formations, he is not a stickler for placing his men in exactly the same spots. His backs in his single wing, unbalanced line formation are not always in the same position. His wingback often is deep, almost on a line with the fullback.

On spins and fakes, the receivers don't cover up the ball by carrying it on the hip, but hold, or fake holding it, in the stomach with the hands crossed over in the manner of the old-fashioned bucking fullback.



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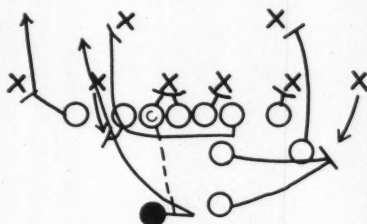
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SCHUTT MANUFACTURING CO.
P. O. Box 88 Litchfield, Illinois

The spinner himself holds the ball loosely in his crotch with his back to the line. He does not crouch but stands straight up and lets the runner take the ball from him.

Since he was devoting his time on the rostrum to feats of legerdemain, Alexander scorned a hieroglyphic exposition of his straight off-tackle play. He set up his basic single wing formation, outlined the course of the off-tackle smash with his finger and then went right into his trick stuff.

He has a whole series of forward pass plays to check his off-tackle smash. **Diag. 1** shows some of the things he does to cross up the enemy. The play starts out like a smash off tackle, with the tailback getting a lead snap from center and running as hard as he can to the right. He takes three fast steps and pulls up short.

Meanwhile the left end goes down deep and in and the wingback races diagonally down the field, or, as a variation, into the flat and then down (option 2). This keeps the defensive halves occupied. The right end sprints toward the halfback, stops, turns around, and receives a pass from the tailback.



Diag. 2

If the backers-up are not fooled, they may start dropping back in the hope of intercepting the pass. The Tech team is prepared for such a contingency. When the defensive fullback starts back-pedaling, the wingback sucks him in again by running across the line of scrimmage and then shooting out into the flat (option 3).

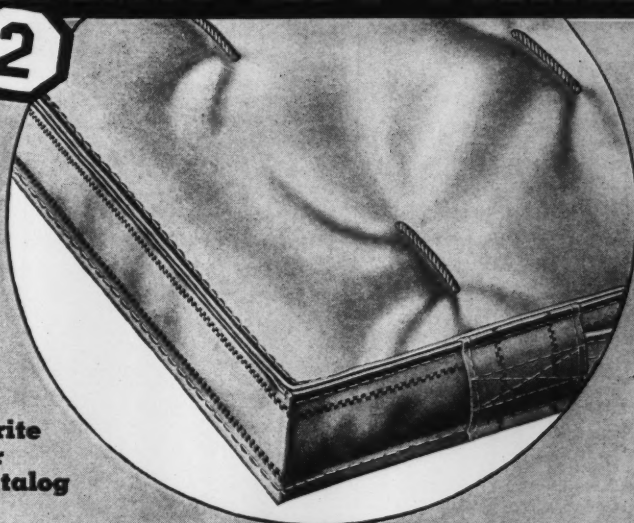
Diag. 2, a cutback inside the weak-side tackle, is another play which works well after the opponents have been getting a dose of off-tackle smashes. When everything starts going away from the weak-side end and tackle, the opponents have a tendency to drift to the strong side. It then becomes easy for the offense to get good inside angles and drive them out.

Another of Alexander's favorite cutback plays, a fullback cutback inside the strong-side tackle, is outlined in **Diag. 3**. Since the backers-up are difficult birds to reach, as they are always moving, Alexander sends his blocking back and left guard straight through for them.

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2

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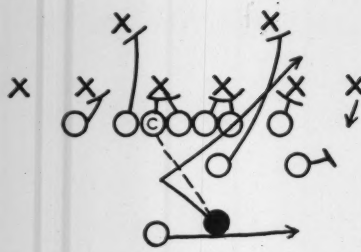


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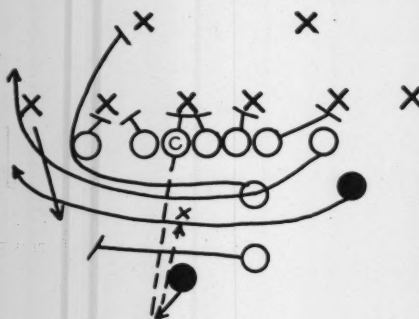
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Diag. 3

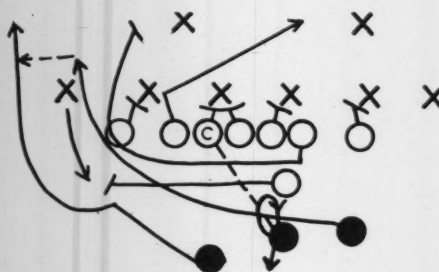
The defensive center, a particularly hard man to get, is frozen by the fullback's fake step to the weak side.

The center and right guard double team the defensive right guard to prevent him from sliding, while the tackles pair up to block the other opposing guard. The right end drives out the defensive left tackle and the wingback takes the end.



Diag. 4

In diagramming his shovel pass to the weak side (Diag. 4), the Tech coach explained that the idea behind this play was to lure the defensive right end deep into the backfield. Alexander dupes the enemy wing by having his tailback fade back three steps on the snap. As the end charges, the fullback crosses over and knocks him out of the play.



Diag. 5

The Tech weak-side reverse is shown in Diag. 5. The fullback receives the snap, steps forward with his left foot, turns and stands straight up, holding the ball in the crotch with both hands. The wingback, who has set up in a retreated position, cuts across and takes the ball. He covers it up with both hands and drives for the hole that is opening inside the weak-side end.

The blocking back takes the end. The tailback fakes at the end but

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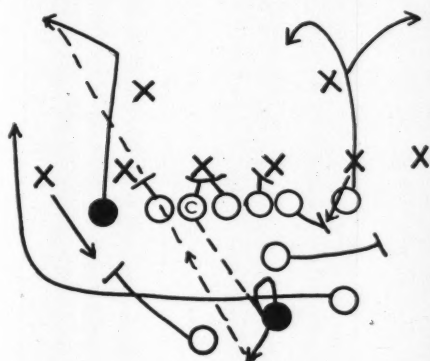
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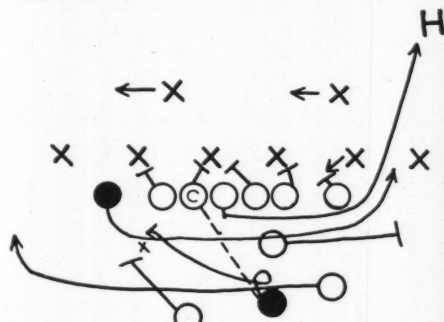
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ducks around him and escorts the ball-carrier on the outside, in position for a lateral or a smack at the halfback.



Diag. 6

Diag. 6 outlines Tech's clever check pass on this reverse. The left end lets the guard take the defensive right tackle while he goes down past the backer-up and then cuts to the outside. The outside tackle slides over to take the tackle on his side, while the tailback and blocking back tie up the defensive ends. The right end goes down the field and either goes straight at the halfback and turns back or shoots toward the outside.



Diag. 7

The Georgia Tech end-around (Diag. 7) is unique in that it evolves from a fake reverse and a spin. As in the check pass, the fullback turns and fakes a reverse to the wingback. But this time he continues turning and runs as if to drive off-tackle.

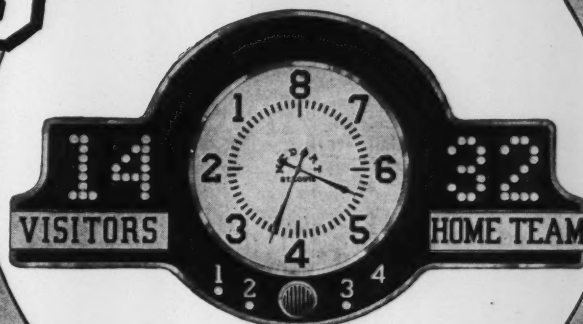
The weak-side end is taken by the tailback, and the defensive tackle by the left guard. The center and the inside tackle double team the defensive right guard, while the right guard pulls out to lead the play at the halfback.

Meanwhile the left end has turned and come back to take the ball from the fullback at about the spot designated in the diagram. He swings around inside the opposite end and outruns the secondaries who have been sucked over to their right.

Several more of Bill Alexander's deceptive plays will be featured in Scholastic Coach next month.

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INDIVIDUAL DIETETIC FACTORS

By **Wilton M. Wilton**

This is the second of a series of articles on the athlete's diet by Wilton M. Wilton, basketball coach at Santa Barbara State College, who has made an exhaustive study of the relationship between dietetic control and conditioning in athletics. Last month the author discussed the progress of dietetic creeds and gave a number of suggestions for the training diet. He now covers individual differences in the diet.

ALTHOUGH coaches are in complete accord on the question of dietetic control for their athletes, a survey of their choice of menus will reveal a tendency to overlook the important matter of individual differences.

We know that individuals are not identical in temperament, physique or body functioning. Hence, a blanket diet which apparently assumes that what is good for one is good for all, can hardly be accepted as being either physiologically or educationally sound.

Among any group of athletes, there are certain physiologic peculiarities which the diet should recognize. There are the overweight, the underweight and those suffering from nervous indigestion and food allergies. The diet should take these factors into account, not only as a possible means of raising the caliber of performance but also to promote the athlete's general health and well-being.

Overweight. From practical experience, we know that excess weight has a detrimental effect on the athlete's performance. It cuts his wind, slows him up and may take some of the edge off his competitive spirit. When a man is heavier than he should be, he draws his energy from his own body fat; a slow-burning fuel which slows him up.

The reducing diet should be planned so that it is adequate for body needs except for fuel value. According to Bogert¹ the best foods to use are: clear soups, tea and coffee without sugar or cream, skim milk or buttermilk, fresh fruits and stewed fruits without sugar, watery and fibrous vegetables (especially leafy vegetables), lean meats, eggs, soft cheese, and small amounts of simple desserts.

By supplying the body with adequate amounts of vitamins, minerals, proteins, and other essentials, it would seem that the body fat could be used as fuel without impairing the health of the athlete. The im-

portant thing to remember in a reducing diet is to watch out for the "trimmings," such as sugar and butter, which mean extra calories.

The athlete with a tendency to plumpness often starts putting on weight after his season closes. The place to control this is at the home training table. Since he is now participating in less activity, he should, as a counterbalance, be given less food.

Underweight. Underweight conditions in athletics seem to be more common toward the end of the season than at the beginning. The pinched athlete is usually sure to be high strung and nervous; the type that fatigues easily, is susceptible to infections and suffers from a number of ill-defined ailments.

The main objective of a diet for an underweight condition is to obtain a high calorie content. Care should be taken to see that there is also an abundant supply of protein, minerals and vitamins to build up body tissues, as well as plenty of roughage to prevent constipation.

In his attempt to gain weight, the athlete should be careful not to indulge in so many fattening foods that his digestion and performance are affected.

It seems plausible to assume that the athlete should attempt to put on weight by increasing his intake of nutritious, non-fattening foods, such as: eggs, milk, fruits, vegetables, cereals, meats, etc., and a more liberal intake of carbohydrates, rather than resort to an increase of fat in the diet.

Other factors which are important to the underweight athlete are: plenty of rest and sleep, fresh air and a lightened load during practice sessions.

Nervous Indigestion. The problem of nervous indigestion seems to be most prevalent before an athletic contest. Bogert believes that some of the causes of nervous indigestion are hurry, worry, noise, confusion, excitement, and strong emotions, especially anger, fear and hate. Most of these conditions are present before a contest.

There is no gainsaying that under such conditions the digestive ability of the athlete will be greatly retarded. Therefore, the quantity of food eaten the day of the game should be small and taken early in the day.

¹Bogert, L. Jean, *Diet and Personality*, p. 183.

Allergies. According to Harding² certain individuals know that they can't eat shellfish or strawberries without getting hives, asthma, hay fever, or a headache. These troubles are often due either to some peculiar sensitiveness of the individual, or to the entrance of a little undigested food, particularly protein, into the blood stream. Medical men call these disturbances "allergic" in nature, the type due to foods being called "food allergy."

Harding is convinced that the importance of food sensitization is more important than the vitamin-, mineral-, etc. -content in the diet. Even some of the most common foods are apt to cause distress to certain individuals.

Dr. Walter C. Alvarez of the Mayo Clinic found that the following foods produced more or less distress in ten to twenty-eight percent of 500 persons questioned: raw onions, milk, cream or ice cream, raw apples, cooked cabbage, radishes, chocolate, raw tomatoes, cucumbers, eggs, fats, greasy and rich foods, cantaloupe, meat, strawberries, and coffee.

There now is a general agreement among investigators, states Harding, that wheat, eggs, milk, chocolate, cabbage, onions, tomatoes, and oranges frequently offend. Distress usually follows soon after the food is ingested, so that by keeping a record of the menu when discomfort occurs it is sometimes quite easy to discover which food is causing the allergy.

It is possible that athletes are just as apt to be sensitive to certain foods as are other individuals, and that a sensitization to foods would decrease their effectiveness. Sansum, Hare and Bowden believe that a tolerance can be built up against a food by taking increasing doses of it.

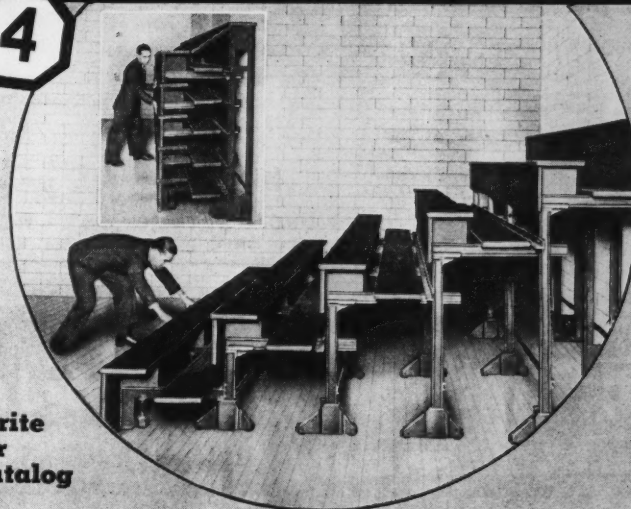
Colds occur quite frequently during the rainy season, and is accompanied by or follows loss of weight and sleep, a run-down condition and low-body resistance. Almost every athlete at one time or another has been afflicted with these ailments during the season.

Several dietetic methods of combating colds include drinking plenty of milk, water and fruit juices to increase urine elimination; eating more fruits and vegetables to increase the alkaline reserve; the avoidance of such acid-forming foods as meats, cereals and breads; and abstinence from greasy foods.

²Harding, T. Swann, "Non-Allergic Food Sensitiveness—How to Trace Down Dietary Idiosyncrasies," *Scientific America*, June 1938, p. 330.

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Salesmen wanted for new territories—Wire or write...

SCHOLASTIC COACH MASTER COUPON

(See page 47 for other listings)

(Numbers in parentheses denote page on which advertisement may be found)

CHUCK MCGUINNESS (48)

- ☐ Information, Clinic and Advisory Service on Football

FRED MEDART MFG. CO.

Catalogs (41-3-5-7)

- ☐ Basketball Scoreboard & Timer
- ☐ New Fan-Shape Backboard & Goal
- ☐ Telescopic Gym Seats
- ☐ Gym Mats

MISHAWAKA RUBBER & WOOLEN MFG. CO (19)

- ☐ Information on Basketball Shoes

NAT. SPORTS EQUIP. CO.

- ☐ Testimonial Folder & Catalog (43)

PENNSYLVANIA SALT MFG. CO. (2)

- ☐ Samples: Perchloron, Tilit

PETERSEN & CO. (37)

- ☐ Catalog, Gym Mats & Covers

J. E. PORTER CORP. (23)

- ☐ Illustrated Folder on New Fan-Shape Backboard

PRENTICE-HALL, INC. (46)

- ☐ Circular on Books

JULES RACINE (44)

- ☐ New Sports Timer Catalog

RENTEN, INC. (37)

- ☐ Details on Electric Score Board

REVERE ELEC. CO. (42)

- ☐ Sports Lighting Bulletin

SCHUTT MFG. CO. (42-4)

- ☐ Information, Uni-Goal
- ☐ New Basketball Goal

SCOTT MFG. CO. (44)

- ☐ Prices, Samples of Gym Mats, Covers

SEAMLESS RUBBER CO.

- ☐ Information (38)

WM. SKINNER & SONS

- ☐ Information on Tackle Twill (32)

L. SONNEBORN SONS (39)

- ☐ Information on Lignophol Wood Finish

A. G. SPALDING (15)

- ☐ Catalog

UNITED CLAY MINES CORP. (48)

- ☐ Bulletin, Field Marker

U. S. RUBBER CO. (37)

- ☐ Information, Footwear

UNIVERSAL BLEACHERS (42)

- ☐ Informative Bulletins

VOIT RUBBER CO. (48)

- ☐ Catalog on Rubber Balls

WEST DISINFECT. CO. (35)

- ☐ Booklet, "Jock Sutherland's Winning Plays"

WESTINGHOUSE ELEC. TRIC (36)

- ☐ Booklet, "Sports Floodlighting"

WILSON SPORTING GOODS (6)

- ☐ Catalog

WINTARK, INC. (32)

- ☐ Folder on Balls

W. F. YOUNG CO. (30)

- ☐ Muscle Chart & Sample

NAME _____ POSITION _____
(Principal, coach, athletic director, physical director)

SCHOOL _____ ENROLLMENT _____

CITY _____ STATE _____

No coupon honored unless position is stated

October, 1940

KNUTE ROCKNE WEEK

NOW that the football season is underway, high schools throughout the country are being invited to participate in Knute Rockne Week. A national committee, with Mr. James H. Crowley, coach of Fordham University, as chairman, has been formed for the purpose of keeping alive the memory of this great teacher.

They are inviting every school to enter the movement by dedicating one of its regularly scheduled games to his memory.

The procedure is simple, involving no schedule tinkering or extra expense. Upon securing a registration blank the coach, with the consent of the coach of the opposing team, fills out the details and returns the blank to the committee. The winning team is presented with a scroll. A form for registering follows:

NATIONAL KNUTE ROCKNE WEEK
Games Comm., Room 2412, 220 E. 42 St., N. Y.
Please register this game:

Home Team.....Coach.....
Address.....
Opponent.....Coach.....
Address.....
Date of Game.....Where Played.....

GYM MATS—ALL TYPES

Guaranteed to give good wear
Also flags, tents and canvas covers of all kinds
Write for Prices.

A. MAMAUX & SON
120 BLVD. OF ALLIES PITTSBURGH, PA.

BETTER
Locker Baskets and Hangers
Made of heavy steel wire. All plated AFTER FABRICATION by double dipping into molten metal. All welds and ends protected. Sanitary and everlasting.
Locker and checking baskets. Many sizes and styles; woven or welded. Hangers. Store garments without wrinkling. Inexpensive to install.
LOW IN PRICE
because made in quantity by specialists and sold directly by mail.

For quotation and literature.

NAME _____
STREET _____
CITY _____ STATE _____

AMERICAN Wire Form COMPANY, INC.
275-279 Grant Ave., Jersey City, N. J.

THE COACH'S BOOK LIST

FOOTBALL

Manual for Functional Football, by John DaGrosa, \$5.
Functional Football, by John DaGrosa, \$3.
Football Line Play, by B. F. Oakes, \$3.
Practical Football, by Crisler and Wieman, \$3.
Kicking the American Football, by LeRoy Mills, \$2.
Winning Football, by Bernie Bierman, \$2.50.
Football, by Glenn Killinger, \$1.
The Five-Man Defensive Line, by John DaGrosa, 50c.
Football Thru the Years, by Dean Hill, \$2.50.
Zuppke of Illinois, by Red Grange, \$2.
Football Formation Stamp, \$1.25.

Sayger Illustrated Series

Ohio State's Offense, by Francis Schmidt, \$1.50.
Minnesota's Offense, by Bernie Bierman, \$1.
Michigan's Offense, by Harry Kipke, \$1.50.
Purdue's Offense, by Noble Kizer, \$1.50.
Rainy Day Coach, by Anderson, Kizer and Sayger, \$1.50.

SIX-MAN FOOTBALL

Six-Man Football, by Stephen Epler, \$3.
Six-Man Football, by J. D. Alexander, \$1.
Practical Six-Man Football, by Kurt W. Lenser, \$1.25.
Six-Man Football, by Ray O. Duncan, \$1.
How to Play Six-Man Football, by Barbour and Sarra, \$1.50.

BASKETBALL

Better Basketball, by Forrest C. Allen, \$4.
100 Drills for Teaching Basketball Fundamentals, by Blair Gullion, \$1.
Basketball Offensive Fundamentals Analyzed, by Blair Gullion, \$2.
Winning Basketball, by Nat Holman, \$2.
Basketball, by Dr. H. C. Carlson, \$2.
Basketball Methods, by John W. Bunn, \$3.25.
Modern Basketball, by Jourdet and Hashagen, \$2.25.
Basketball, by Charles Murphy, \$1.
Basketball, by Clair Bee, \$1.
Lowry's Basketball Score and Scout Book, 65c.

Sayger Illustrated Series

Pittsburgh's Offense, by H. C. Carlson, \$1.
Indiana's Offense, by Everett Dean, \$1.
Ohio State Offense, by Harold Olsen, \$1.
Butler Offense, by "Tony" Hinkle, \$1.50.
Basketball's Assistant Coach, by Hinkle and Sayger, \$1.

TRACK AND FIELD

Track and Field Athletics, by Tuttle and Bresnahan, \$3.25.
The Olympic Coach, by Lawson Robertson, \$1.
Track and Field, by Charlie Paddock, \$2.50.
Track, by Ray Conger, \$1.
All American Track and Field Scorebook, \$1.25.
Cine Flip Books, by Famous Coaches, \$1 each event.

GIRLS' BASKETBALL WALL CHARTS

Every girls' basketball coach and gymnasium instructor should have them. The fundamental techniques of the girls' game on three 14-inch by 22-inch posters of extra heavy cardboard. Passing, shooting and individual tactics—all graphically illustrated in easy-to-follow form by the use of large, clear motion picture stills. Each wall chart contains three techniques on different phases of the game. Invaluable as a teaching device placed where the girls can always see them. Price, three for \$1, postpaid. Shipped in rigid corrugated envelope.

OTHER SPORTS

Baseball Coaching Aids, by H. S. DeGroat, \$2.75.
Major League Baseball, by Ethan Allen, \$3.
Baseball, by Jack Coombs, \$2.75.
Baseball, by Dan Jessee, \$1.
Budge on Tennis, by J. Donald Budge, \$2.
Tennis, by E. and B. Bruce, \$2.50.
Better Badminton, by Jackson and Swan, \$1.
How to Play Golf, by Ben Thomson, \$1.75.
Groove Your Golf, by Ralph Guldahl, \$2.
Sports as Taught and Played at West Point, by 17 Coaches, \$2.
The Coaching of Soccer, by Hubert Coyer, \$2.
Primer of Figure Skating, by Maribel Vinson, \$2.75.
The Tumbling Manual, by LaPorte and Renner, \$3.
The Teaching of Stunts and Tumbling, by B. and D. Cotteral, \$3.
Hockey, by Vaughan and York, \$3.50.

Safety in Athletics, by Lloyd, Deaver and Eastwood, \$3.25.
Athletics in Education, by Williams and Hughes, \$3.50.
Wrestling, by E. C. Gallagher, \$1.
Wrestling (Intercollegiate and Olympic), by Henry A. Stone, \$3.
Wrestling Wall Chart, by Hugo Otopalik, \$1.50.
The Complete Swimmer, by Ulen and Larcom, \$3.
American Red Cross Series: First Aid; Water Safety; Swimming and Diving, 60c each.
Swimming, by Matt Mann, \$2.
Swimming, by Victor E. Lawson, \$1.50.
Modern Methods in Archery, by Reichart and Keasey, \$1.
The New Trainers Bible, by Dr. S. E. Bilik, \$2.50.
Physical Education Class and Record Book, by Hugo Fischer, 75c.

All books sent postpaid upon receipt of check, money order, or school order form.

SCHOLASTIC COACH BOOKSHOP

220 EAST 42 STREET

NEW YORK, N. Y.